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REVISION OF AUSTRALIAN OENOCHROMIDAE (LEPIDOPTERA). I.

By A. Jefferis Turner, M.D., F.E.S.

(Twenty-six Text-figures.)

[Read 30th October, 1929.]

The family name Oenochromidae was first used by Guenée (*Lep.*, ix, p. 183), though without sufficient definition, and including only the seven genera *Monoctenia*, *Oenochroma*, *Arhodia*, *Phallaria*, *Gastrophora*, *Sarcinodes* and *Hypographa*. The first real foundation of the family is due to Meyrick, who gave (These Proceedings, 1889, p. 1136) a full revision of the genera and species known in Australia at that date. Meyrick, who did not recognize *Oenochroma* as a valid genus, named the family Monocteniadae, but in accordance with entomological usage I have reverted to the older name. In 1910 Prout published a monograph (Genera Insectorum, Fam. Geometridae, Subfam. Oenochrominae) dealing with the group on a world-wide basis, and it is hardly necessary to say, that I have found his careful work of the greatest help in preparing this revision.

The moths commonly known as Geometers were early recognized as a natural group, which has been treated by many authors as a single family, the Geometridae, divisible into several subfamilies, of which the Oenochrominae is one. The main reason for this has been probably that superfamilies are not recognized by these authors. The differences between the Larentiadae, Sterrhidae, Geometridae, Boarmiadae and Oenochromidae are certainly greater than those between the Arctiadae, Nolidae and Noctuidae, or than those between the Hypsidae and Lymantriadae, and I agree with Meyrick that they have equal if not greater claims to family rank. It might be natural then to combine them in a superfamily, the Geometroidea. This I regard as untenable, on account of the very close structural similarity of the more primitive Boarmiadae and Oenochromidae with the Notodontidae, the only absolute distinction present in the Geometrine families being the curved base of the costal vein of the hindwing usually so pronounced as to form a humeral angle. Certainly the Notodontid and Geometrid larvae have specialized in very different directions, but if the more primitive larvae of the two groups are compared, for instance, those of *Brephos* and *Pygaera*, not much difference will be found. It must be remembered that the phylogenetic relationship of any families is determined entirely by that of their most primitive genera. I refer all these families, therefore, to the Notodontoidea, and in this I agree with Meyrick, but as the Geometers remain a natural group, and it is convenient to have a name for them, I propose to write of them as the Geometrites.

The Oenochromidae are of special interest to the Australian entomologist, for it is in his continent only that they are at all numerously developed; in all other regions they are represented by few and often isolated genera. I imagine that at the period when the ancient Austral Land, which now forms the western half of Australia, was first separated from Southern Asia, the Larentiadae, Sterrhidae

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The Oenochromidae are of special interest to the Australian entomologist, for it is in his continent only that they are at all numerously developed; in all other regions they are represented by few and often isolated genera. I imagine that at the period when the ancient Austral Land, which now forms the western half of Australia, was first separated from Southern Asia, the Larentiadae, Sterrhidae and Geometridae had not yet evolved, and the Boarmiadae were still a restricted group. The subsequent development of these families has superseded, and to a large extent probably exterminated, the more primitive Oenochromidae throughout the world. In Austral Land, now merged in Australia, sheltered from this competition, they developed two considerable groups—the *Dichromodes-Taxeotis* group and the *Oenochroma-Hypographa* group—together with many genera not closely connected to either. Subsequently a few species of Papuan or Indo-Malayan origin entered Queensland, *Eumelea*, *Sarcinodes*, *Physetostege*, *Noreia*, *Celerena*, *Ozola*, *Derambila*, but these form but an insignificant addition both in numbers and range of distribution.

The Oenochromidae display considerable variation in structure, and being the most primitive Geometrites they throw much light on the phylogeny, not only of the group as a whole, but also of its constituent families. This I propose to illustrate by some figures of their neuration, using instead of the numerical notation employed elsewhere in this paper a morphological notation, which is that of Comstock and Needham as modified by Tillyard. The two notations are tabulated thus:

	Numerical.	Morphological.	Contracted into.
Forewing:	12	subcostal	Sc.
	11, 10, 9, 8, 7	first, second, third, fourth and fifth radial	R_1, R_2, R_3, R_4, R_5
	6, 5, 4	first, second and third median	M_1, M_2, M_3
	3	first division of first cubital	Cu_{1a}
	2	second division of first cubital	Cu_{1b}
	1*b*	first anal + second anal	1A, 2A
Hindwing	as forewing, except vein 7, and vein 1*a*	which is the third anal	3A
	7	Radial sector (which does not divide in the hindwing)	Rs

In both wings Cu_2 (1*c* in the numerical notation) is absent.

Commencing with the hindwing, Figure 1 shows its structure in *Celerena*. The humeral angle of Sc is not very marked, it is well separated from the cell, from near the base of which it is joined by R_1. This is a primitive neuration, found for instance also in the primitive, but quite unrelated, family Anthelidae as shown in Figure 2. Early in the development of the Oenochromidae there arose a tendency to the close approximation of the united veins Sc + R_1 to the cell, as shown in *Zeuctophlebia*, Figure 3. Note that the anastomosis of R_1 with Sc is still retained. In most cases with this approximation the basal portion of R_1 has failed to chitinize, and therefore does not appear in the imaginal neuration, although it would almost certainly appear in the tracheation of the pupal wing. This structure is illustrated by *Xenogenes*, Figure 4, in which the basal curvature of Sc is only slight, so that its neuration is nearly identical with that of *Diceratucha*, Figure 5, a genus usually referred to the Oenochromidae, but which I believe to belong to the Notodontidae. Figure 6 is that of *Dirce*, a primitive genus of the Boarmiadae, which are distinguished by the absence of M_2. *Epicoma*, a genus of Notodontidae, is shown in Figure 7 to have the same neuration as *Diceratucha*. In three unrelated genera of Oenochromidae, Sc has become fused and Geometridae had not yet evolved, and the Boarmiadae were still a restricted group. The subsequent development of these families has superseded, and to a large extent probably exterminated, the more primitive Oenochromidae throughout the world. In Austral Land, now merged in Australia, sheltered from this competition, they developed two considerable groups—the *Dichromodes-Taxeotis* group and the *Oenochroma-Hypographa* group—together with many genera not closely connected to either. Subsequently a few species of Papuan or Indo-Malayan origin entered Queensland, *Eumelea*, *Sarcinodes*, *Physetostege*, *Noreia*, *Celerena*, *Ozola*, *Derambila*, but these form but an insignificant addition both in numbers and range of distribution.

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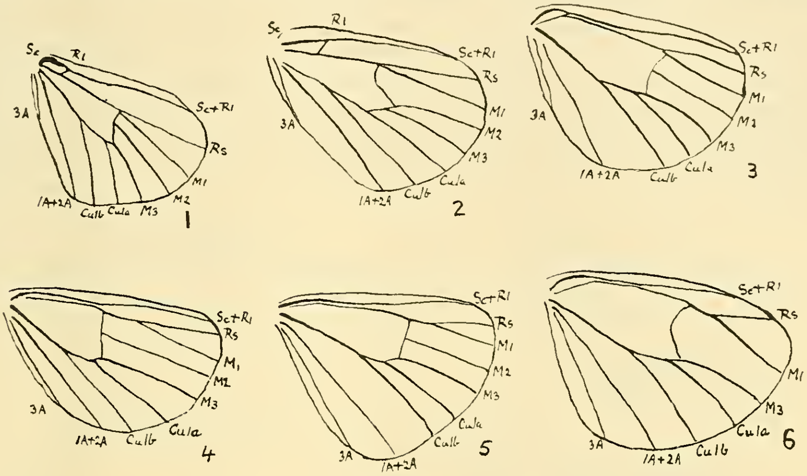
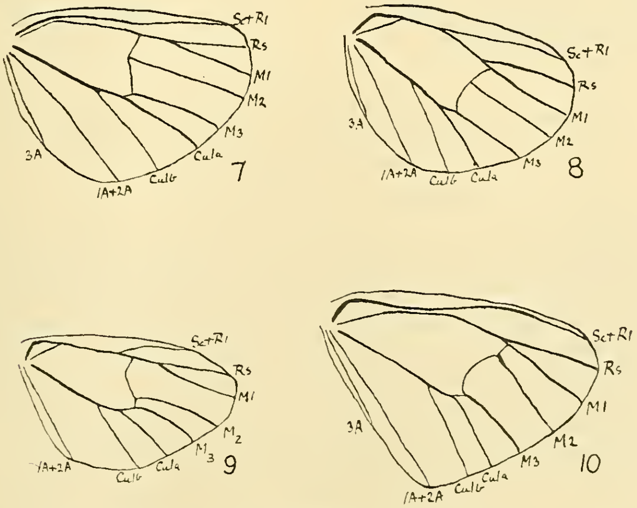


Text-figs. 1-6.
1.—*Celerena griseofusa* Warr. 2.—*Anthela xantharcha* Meyr., hindwing.
3.—*Zeuctophlebia squalidata* Wlk. 4.—*Xenogenes eustratiodes* Prout.
5.—*Diceratucha xenopis* Low. 6.—*Dirce lunaris* Meyr.



Text-figs. 7-10.
7.—*Epicoma tristis* Lewin. 8.—*Gerusia excusata* Wlk.
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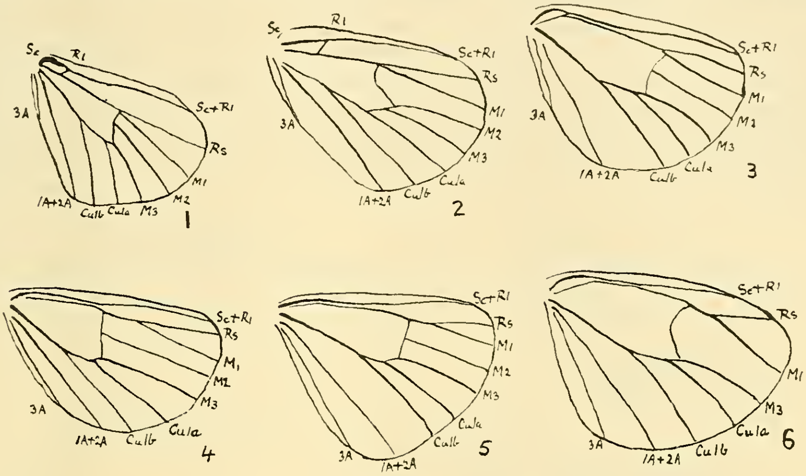

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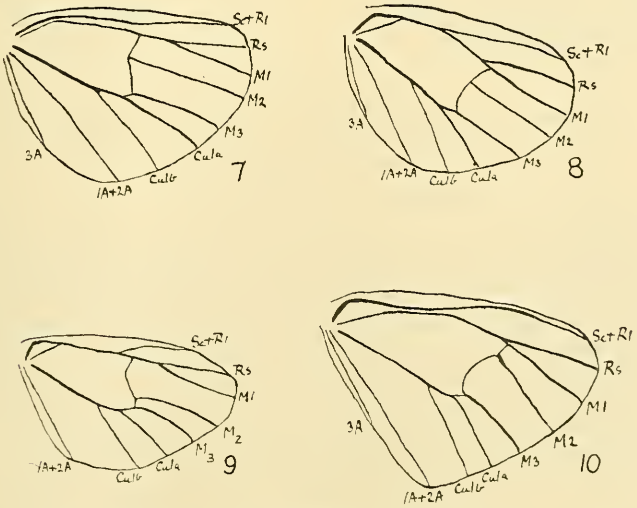

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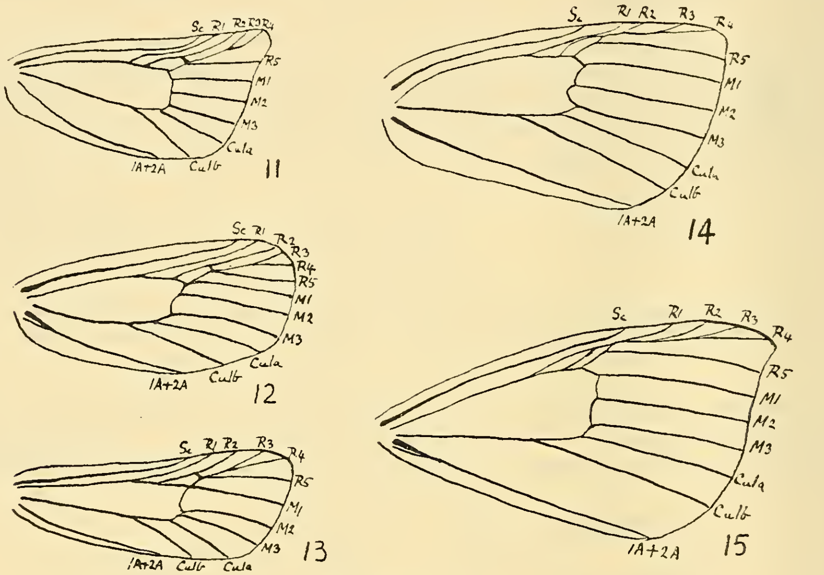
from above the middle of the cell approximated at origin to M_1. This structure is characteristic of the family Geometridae (Figure 25), indeed the neuration of *Cernia* is exactly that of this family in both wings, although its affinities to other genera of Oenochromidae are close. In *Sarcinodes* this peculiar character is pushed to an extreme, M_2 arising from very close to the upper angle of the cell.

The neuration of the forewings is rather more complex, and has not been so well understood. Particular attention should be given to the radial veins. The most primitive forewing is that of *Xenogenes*, Figure 11. Here veins R_2 and R_3 are stalked from the cell, while R_1 remains free. Soon after its separation R_3 anastomoses with R_4, forming the "accessory cell" or "areole," from which R_3 separates independently. An areole of this type is present in many families, for instance in the Notodontidae, Figure 12, and the Noctuidae, Figure 13. The phylogenetic importance of the areole has not been sufficiently appreciated by lepidopterists. It is present in the more primitive genera of the Notodontoidea, Noctuoidea, Drepanoidea, Tineoidea, Castnoidea and Cossoidea. In the Rhopalocera it has disappeared in the adult wing, but is present in the pupal tracheation, and there is no reasonable doubt that the same will be found to hold true of the Zygaenoidea, Pyraloidea and Pterophoroidea. In the Homoneura it is always present in the Micropterygoidea, although absent in the Hepialoidea. A precisely similar structure is found in the Trichoptera and Mecoptera, where it is known as the radial cell. This would be its correct name in the Lepidoptera also, but as in that family the term "cell", as applied to the neuration, is used in a different sense, to avoid confusion, I have adopted the convenient word "areole." The



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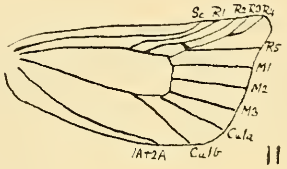

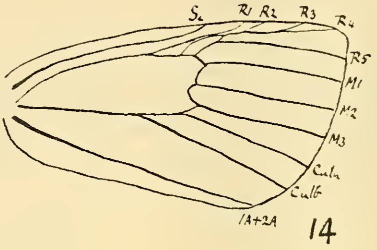

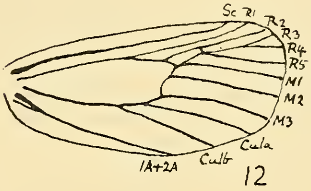

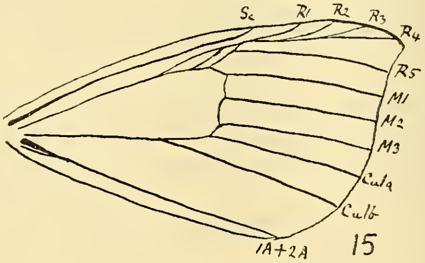

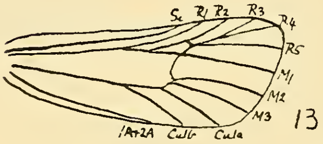

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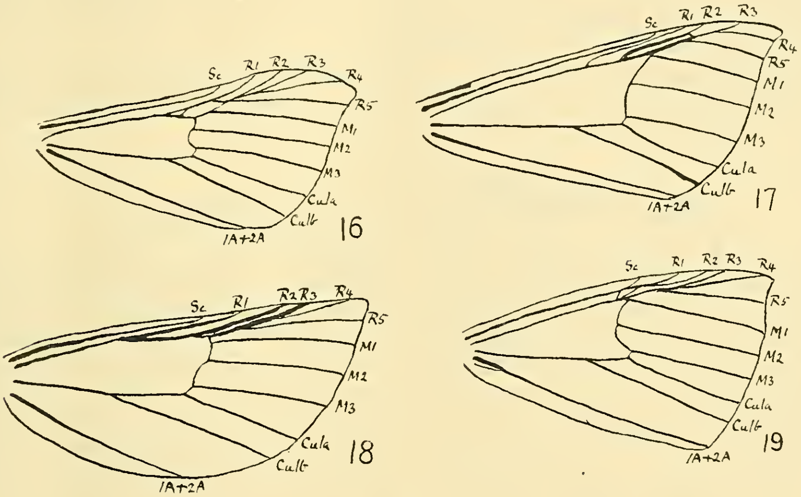
radial cell is indeed of older date than the Lepidoptera themselves, being present in fossil wings before that order existed.

From some form like *Xenogenes* arose the *Dichromodes* group, which is largely developed in Australia. *Dichromodes*, Figure 14, has R_2, R_3 and R_4 arising from the areole by a common stalk, and R_1 is closely applied to the areole, but does not anastomose with it. In *Epidesmia*, Figure 15, R_1 anastomoses strongly with the areole, forming a structure which is conveniently known as a "double areole." It would be more accurate to give this second accessory cell a distinct name, and I propose to call it the "pseudareole."* This forewing neuration is that characteristic of the family Larentiadae, Figure 16, where it is extremely constant, except that the pseudareole disappears by coalescence in many genera owing to the bases of R_1 and R_2 having become coincident.

We now proceed to consider the next largest group in the Australian fauna, the *Oenochroma* group. These consist of larger, stout-bodied moths, with the underside of the thorax densely hairy, all probably primitive characters. The neuration of *Oenochroma*, Figure 17, differs from that of *Xenogenes* essentially only in the extremely long and narrow areole, from which, however, R_2 arises separately. With this form of areole there is a strong tendency for the very short basal portion of R_3 to fail to chitinize, so that that vein is apparently "captured" by R_4, and the areole is lost by dissociation. This is illustrated by *Arhodia*, Figure 18, where R_2 and R_3 are even closer together than shown in the figure, but disconnected. That the difference between these two forms is of very little morphological importance, is shown by the fact that they may occur indiscriminately, not only in the same genus, but even in the same species.



Text-figs. 16-19.
16.—*Cidaria subochraria* Gn. 17.—*Oenochroma vinaria* Gn.
18.—*Arhodia lasiocamparia* Gn. 19.—*Eumelea rosalia* Stoll.

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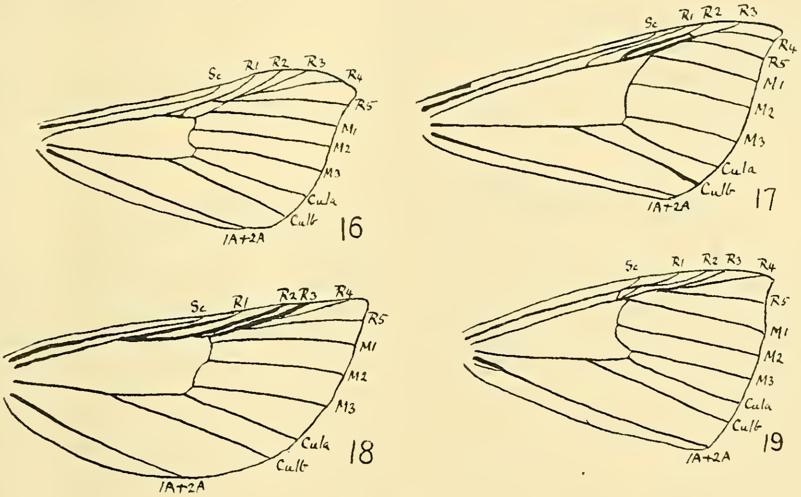

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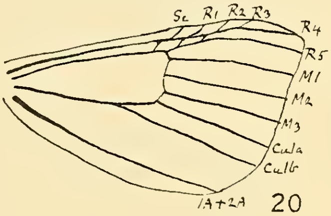
The *Oenochroma* group consists of a number of small or monotypical genera, only two or three being of even moderate size. This points probably to its being a group of considerable age, which has undergone much loss in competition with more recently developed groups. It contains only one extra-Australian genus *Sarcinodes*, in which, as already noted, the hindwings are specialized.

There is another smaller group in which R_1 of the forewings anastomoses first with Sc and then with R_2. It is not a natural group like the two preceding, but contains several genera more or less allied. A simple example is the forewing of the very isolated genus *Eumelea*, Figure 19. Here the areole has been lost by disconnection of R_2 from R_3, as already explained, but there is a pseudareole. A very similar neuration is found in *Cernia* and is characteristic also of the Geometridae, and of many of the Boarmiadae. In *Encryphia*, Figure 20, the picture is more complicated; R_1 anastomoses with Sc and R_2, while the common stalk of R_2 and R_3 anastomoses with R_4, so that there are both areole and pseudareole as in *Epidesmia*. *Physetostege* and *Noreia* are allied, but in the former R_2 separates independently from the areole. In *Zeuctophlebia*, Figure 21, R_1 runs into Sc and there is no pseudareole.

It is not necessary to discuss the neuration of every genus, but we must note the very distinct neuration of two extra-Australian genera, which have entered Queensland in recent geological time. They are *Derambila*, Figure 22, and *Ozola*. In the former R_1 runs into Sc immediately after its origin, and the areole has disappeared by coalescence, R_3 and R_4 being completely coincident. *Ozola* differs only in R_1 anastomosing first strongly with Sc and then with R_2. These genera exhibit a specialized line of development, which is quite unrepresented in the truly Australian genera, but one that may have originated from a form not very remote from the small *Encryphia* group.



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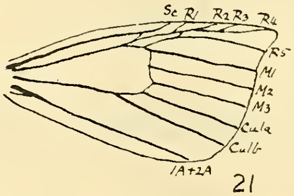

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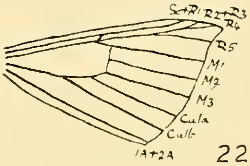

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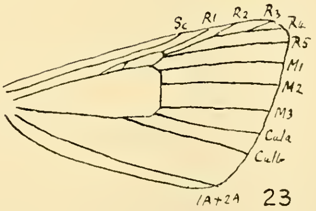


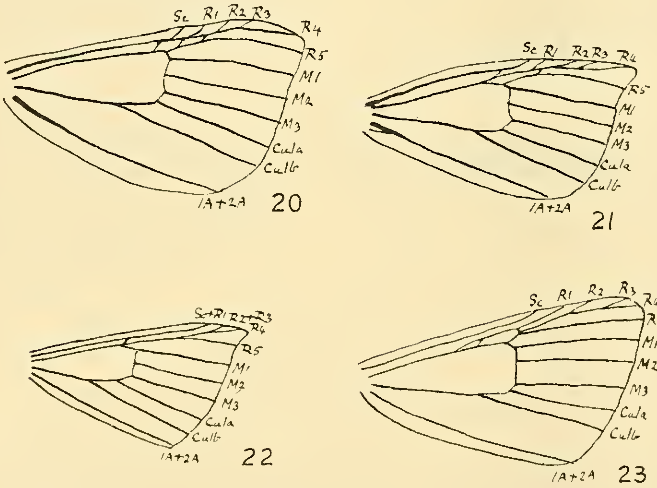
23

Text-figs. 20-23.
20.—*Encryphia frontisignata* Wlk. 21.—*Zeuctophlebia squalidata* Wlk.
22.—*Derambila catherina* Prout. 23.—*Autanepsia poliodesma* Turn.

The *Oenochroma* group consists of a number of small or monotypical genera, only two or three being of even moderate size. This points probably to its being a group of considerable age, which has undergone much loss in competition with more recently developed groups. It contains only one extra-Australian genus *Sarcinodes*, in which, as already noted, the hindwings are specialized.

There is another smaller group in which R_1 of the forewings anastomoses first with Sc and then with R_2. It is not a natural group like the two preceding, but contains several genera more or less allied. A simple example is the forewing of the very isolated genus *Eumelea,* Figure 19. Here the areole has been lost by disconnection of R_2 from R_3, as already explained, but there is a pseudareole. A very similar neuration is found in *Cernia* and is characteristic also of the Geometridae, and of many of the Boarmiadae. In *Encryphia*, Figure 20, the picture is more complicated; R_1 anastomoses with Sc and R_2, while the common stalk of R_2 and R_3 anastomoses with R_4, so that there are both areole and pseudareole as in *Epidesmia. Physetostege* and *Noreia* are allied, but in the former R_2 separates independently from the areole. In *Zeuctophlebia*, Figure 21, R_1 runs into Sc and there is no pseudareole.

It is not necessary to discuss the neuration of every genus, but we must note the very distinct neuration of two extra-Australian genera, which have entered Queensland in recent geological time. They are *Derambila*, Figure 22, and *Ozola.* In the former R_1 runs into Sc immediately after its origin, and the areole has disappeared by coalescence, R_3 and R_4 being completely coincident. *Ozola* differs only in R_1 anastomosing first strongly with Sc and then with R_2. These genera exhibit a specialized line of development, which is quite unrepresented in the truly Australian genera, but one that may have originated from a form not very remote from the small *Encryphia* group.



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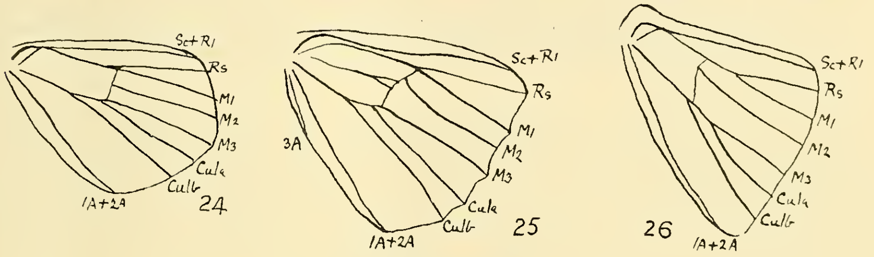
In discussing the neuration of the Oenochromidae, we have incidentally shown how that characteristic of the Larentiadae, Geometridae and Boarmiadae may have developed. The only family remaining is the Sterrhidae. In a few genera of this family, *Organopoda*, *Rhodostrophia*, *Autanepsia*, Figure 23, a double areole is developed, which in the last-named genus is exactly similar to that in the *Taxeotis* group and in the Larentiadae (compare Figure 15 and Figure 16). The pseudareole in *Autanepsia* is small, and in the *Ptychopoda-Scopula* group, to which it belongs, has disappeared in most cases by the fusion of the bases of R_1 and R_2, leaving a single areole strictly comparable with that found in many Larentiadae. In *Organopoda* the areole is much smaller than the pseudareole, and in the *Anisodes* group the small accessory cell, which is usually present, is probably a pseudareole, the base of R_2 having fused with R_3. The opinion I expressed in my revision of the Sterrhidae (These PROCEEDINGS, 1907, p. 635) that this family originated from the Geometridae, I now consider erroneous, for in the latter family the areole is never developed, the distal dissociation of R_2 from R_3 by the loss of the basal origin of the latter having become a fixed character.* Certainly the structure of the forewing suggests a common origin of the Sterrhidae and Larentiadae from the Oenochromidae. At first sight, however, the structure of the hindwing, Figure 24, appears to negative such a supposition. Instead of a long approximation of Sc + R_1 to the cell, there is a short anastomosis near their bases followed by an immediate divergence. This is a constant character in the family, and is not found in any Oenochromid genus, so far as I know. A similar structure is, however, found in the Geometridae, where the most primitive genera, Figure 25, have the long approximation, while some of the most modified have the basal anastomosis and divergence, Figure 26. Every intermediate—gradual shortening of the approximation, gradual closer approximation near the base—can be traced in this family. There seems no reason why a parallel development should not have occurred in the Sterrhidae, though here, in the absence of intermediate forms, no direct evidence of it remains. Possibly, however, some might be obtained by a careful and detailed examination of the pupal tracheation.



Text-figs. 24-26.
24.—*Scopula recessata* Wlk. 25.—*Protophyta castanea* Low.
26.—*Urolitha bipunctifera* Wlk.

Before proceeding to the systematic part of this paper I wish to acknowledge the generous assistance I have received by the loan of specimens from the South

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* *Leucesthes* and *Mixochroa*, both without a frenulum and belonging to the least primitive section of the family, are exceptions. Here the presence of the anastomosis appears to be reversionary.

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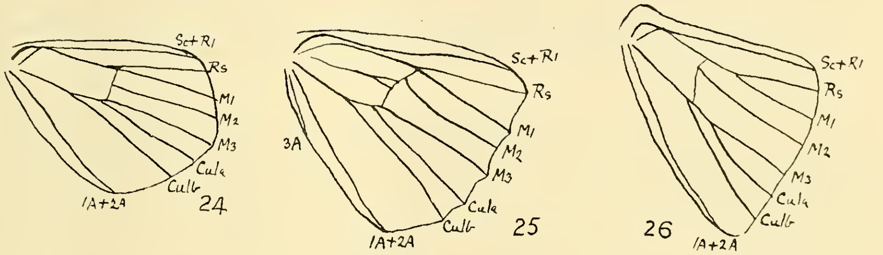

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Family OENOCHROMIDAE.

Face smooth or with anterior tuft of scales, rarely with corneous prominence or process. Tongue well developed, very rarely absent. Labial palpi moderate or sometimes long. Thorax and abdomen slender and smooth, or stout with undersurface of thorax densely hairy. Posterior tibiae rarely without middle spurs, very rarely distorted in ♂ (*Celerena*). Female very rarely apterous. Forewings with areole usually present, sometimes double. Hindwings with R_1 rarely developed, subcostal with humeral curve or angle, usually closely approximated to cell as far as middle.

This family includes a number of subgroups, for the most part not clearly definable, comprising the more primitive genera of the Geometrites. It can hardly be defined positively, for it consists of the residuum left after the separation of Larentiadae, Sterrhidae, Geometridae, and Boarmiadae. I include here the Brephinae of Prout, separated by him on characters that I consider illusory, and all the groups referred by him to the Oenochromidae, though I think his revision contains a few genera which should be referred elsewhere.

Dirce Prout and *Xenomusa* Meyr., I refer to the Boarmiadae. In the former, vein 5 of the hindwings is absent, in the latter, if present at all, it is vestigial. *Diceratucha* Swin., which has no trace of a humeral curve or angle in the subcostal of the hindwing, belongs to the Notodontidae. It is nearly allied to *Gallaba* Wlk., with which it agrees in the structure of the tegulae, also in wing-shape and wing-pattern. The chitinous frontal process, which is exceptional in that family, occurs in the Noctuidae as well as the Oenochromidae and Boarmiadae. It is an adaptation to facilitate emergence from the pupal shell, and is most often found in genera inhabiting arid regions.

Key to Genera.

1. Forewings with 7, 8, 9 stalked, 10 absent 2
   Forewings with 10 present 3
2. Forewings with 11 running into 12; posterior tibiae without middle spurs .... *Derambila* 43
   Forewings with 11 anastomosing with 12 and 10; posterior tibiae with a single median spur .... *Ozola* 44
3. Forewings with 10 and 11 long-stalked 4
   Forewings with 10 and 11 separate at origin 9
4. Forewings with the common stalk of 10 and 11 anastomosing with 12 5
   Forewings with stalk of 10 and 11 not anastomosing with 12 7
5. Hindwings with 12 closely approximated to cell 6
   Hindwings with 12 well separated from cell .... *Celerena* 36
6. Fore and hindwings with 5 from much above middle of cell .... *Axiagasta* 37
   Fore and hindwings with 5 from middle of cell .... *Zeuctophlebia* 39
7. Thorax and abdomen slender, the former not densely hairy beneath 8
   Thorax and abdomen stout, the former densely hairy beneath .. *Amphiclasta* 38
8. Forewings without areole; hindwings with 6 and 7 separate .... *Systatica* 7
   Forewings with areole; hindwings with 6 and 7 stalked .... *Satraparchis* 8
9. Forewings with 11 anastomosing with 12 and 10 10
   Forewings with 11 not anastomosing with 12 and 10 16

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Forewings with 11 not anastomosing with 12 and 10 16

10. Forewings without areole 11
Forewings with areole 12
11. Forewings with 10 stalked with 7, 8, 9 .... *Cernia* 34
Forewings with 10 from cell .... *Eumelea* 35
12. Hindwings with 12 anastomosing with cell to middle .... *Gerusia* 31
Hindwings with 12 not anastomosing with cell 13
13. Hindwings with 12 closely applied to cell from one-fourth to three-fourths .... *Enchocrana* 19
Hindwings with 12 diverging from cell near base 14
14. Antennae of ♂ ciliated .... *Noreia* 41
Antennae of ♂ bipectinate 15
15. Forewings of ♂ with a large sub-basal fovea .... *Physetostege* 40
Forewings of ♂ without fovea .... *Encryphia* 42
16. Forewings with areole present, not extremely long and narrow; thorax and abdomen slender, the former not or slightly hairy beneath 17
Forewings with areole extremely long and narrow or lost by disconnection of 10; thorax and abdomen usually stout, the former usually densely hairy beneath 28
17. Forewings with a double areole 18
Forewings with areole single 23
18. Hindwings with 12 approximated to cell to near its end 19
Hindwings with 12 diverging from cell about middle 20
19. Forewings with 12 free .... *Nearcha* 1
Forewings with 12 connected by a bar with areole .... *Antasia* 3
20. Antennae of ♂ unipectinate .... *Epidesmia* 9
Antennae of ♂ simple or bipectinate 21
21. Antennae of ♂ simple or rarely very shortly pectinate .... *Taxeotis* 2
Antennae of ♂ bipectinate, pectinations long 22
22. Forewings with 12 connected by a bar with areole .... *Tapinogyna* 4
Forewings with 12 free .... *Cathaemacta* 5
23. Forewings with 8, 9, 10 arising from areole by a common stalk 24
Forewings with 10 arising separately from areole .... *Xenogenes* 15
24. Face with a strong anterior corneous projection .... *Arcina* 10
Face smooth or with a short tuft of scales, without corneous projection 25
25. Forewings with raised tufts of scales 26
Forewings without raised scales 27
26. Palpi moderate; hindwings with 3 arising from nearer 4 than 2 .... *Bradyctena* 11
Palpi long; hindwings with 3 arising from midway between 2 and 4 .... *Phrixocomes* 12
27. Antennae of ♂ unipectinate .... *Dichromodes* 13
Antennae of ♂ bipectinate .... *Adeixis* 14
28. Hindwings with 12 anastomosing with cell 29
Hindwings with 12 not anastomosing with cell 31
29. Forewings with 11 anastomosing with 12 30
Forewings with 11 free .... *Macroctenia* 22
30. Posterior tibiae without middle spurs .... *Dinophalus* 17
Posterior tibiae with middle spurs .... *Lissomma* 18
31. Thorax with posterior crest 32
Thorax without crest 33
32. Antennae of ♂ unipectinate; palpi and its terminal joint moderate .. *Hypographa* 20
Antennae of ♂ bipectinate; palpi and its terminal joint long .... *Carthaca* 27
33. Posterior tibiae without middle spurs 34
Posterior tibiae with middle spurs 35
34. Face with strong conical corneous projection .... *Homospora* 30
Face smooth, not projecting .... *Arhodia* 29
35. Thorax and abdomen slender, the former not or slightly hairy beneath 36
Thorax and abdomen moderate or stout, the former hairy beneath 37
36. Forewings without areole; antennae of ♂ unipectinate .... *Ecphyas* 6
Forewings with areole; antennae of ♂ bipectinate .... *Symphylistis* 16
37. Hindwings with 5 from close to upper angle of cell .... *Sarcinodes* 21
Hindwings with 5 not from close to upper angle of cell 38

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Hindwings with 5 not from close to upper angle of cell 38

38. Hindwings with 5 from above middle of cell 39
Hindwings with 5 from middle of cell 41
39. Antennae of ♂ unipectinate .... *Monoctenia* 23
Antennae of ♂ imparipectinate .... *Antictenia* 26
Antennae of ♂ bipectinate 40
40. Hindwings with 6 and 7 stalked .... *Gastrophora* 28
Hindwings with 6 and 7 not stalked .... *Circopetes* 32
41. Antennae of ♂ unipectinate .... *Oenochroma* 25
Antennae of ♂ bipectinate 42
42. Hindwings with 3 arising from midway between 2 and 4; 12 approximated to cell to three-fourths .... *Phallaria* 24
Hindwings with 3 arising from nearer 4 than 2; 12 diverging from cell about middle .... *Onychodes* 33

Genus 1. NEARCHA.

Nearcha Meyr., PROC. LINN. SOC. N.S.W., 1889, 1152; Prout, *Gen. Insect.* Oenochrom., 29.

Type, *N. buffalaria* Gn.

Face usually with projecting cone of scales, or smooth with a slight anterior tuft on lower edge. Tongue present. Palpi moderate or long, porrect, thickened with more or less appressed or rough scales. Antennae of ♂ bipectinate, pectinations long and continued to apex. Thorax and abdomen slender; the former smooth or slightly hairy beneath. Femora smooth. Tarsi not spinulose or with minute spines on posterior pair only. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 free. Hindwings with 6 and 7 stalked, 12 approximated to cell throughout.

Easily recognized by the bipectinate ♂ antennae, stalking of 6 and 7 of hindwings, and approximation of 12 as far as end of cell. The secondary sexual characters should be carefully observed. I have redescribed the species, as there has been much confusion over some of them.

Key to Species.

1. Face blackish 2
Face ochreous-whitish or grey with strong anterior tuft 10
2. Palpi 3½ .... *ursaria* 1
Palpi less than 3 3
3. Forewings with postmedian line more or less sinuate 4
Forewings with postmedian line rounded 9
4. Palpi nearly 3 .... *protophaes* 8
Palpi 2½ 5
Palpi less than 2½ 6
5. Forewings with termen sinuate beneath apex .... *tristificata* 4
Forewings with termen not sinuate .... *dasyzona* 3
6. Forewings with postmedian line denticulate .... *caronia* 9
Forewings with postmedian line not denticulate 7
7. Forewings with postmedian line outwardly bowed in middle .... *aridaria* 6
Forewings with postmedian line only slightly sinuate 8
8. Forewings with postmedian line more or less ferruginous .... *buffalaria* 5
Forewings with postmedian line not ferruginous .... *benecristata* 2
9. Forewings reddish-ochreous-whitish .... *ophla* 10
Forewings grey .... *staurotis* 7
10. Hindwings with apex acute, termen straight .... *curtaria* 13
Hindwings not so 11
11. Head and upper surface of palpi grey .... *nullata* 11
Head and upper surface of palpi grey-whitish .... *atyla* 12

This key will not be found always easy to apply. For specimens of the male sex the following will usually be more satisfactory.

38. Hindwings with 5 from above middle of cell 39
Hindwings with 5 from middle of cell 41
39. Antennae of ♂ unipectinate .... *Monoctenia* 23
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This key will not be found always easy to apply. For specimens of the male sex the following will usually be more satisfactory.

Key Based on Secondary Sexual Characters of Male.

1. Hindwings with one or more tufts or ridges of fine hairs on under surface .. 2
   Hindwings without tufts or ridges beneath 9
2. Forewings with ridges of hairs on under surface .... *ursaria* 1
   Forewings without raised hairs beneath 3
3. Abdomen with fan-like lateral tufts on middle segments .... *benecristata* 2
   Abdomen without fan-like tufts 4
4. Hindwings with tuft of hair on posterior margin of cell .... *dasyzona* 3
   Hindwings without tuft on posterior margin of cell 5
5. Hindwings with tuft of hair on anterior margin of cell about middle 6
   Hindwings without tuft on anterior margin of cell about middle 8
6. Hindwings with two long ridges of pale hairs extending from cell to termen .... *nullata* 11
   Hindwings without such ridges 7
7. Hindwings with high ridge of hairs on posterior margin of distal half of cell .... *tristificata* 4
   Hindwings without ridge of hairs on posterior margin of cell ...... *buffalaria* 5
8. Hindwings with ridge of whitish-ochreous hairs on stalk of veins 6 and 7 .... *atyla* 12
   Hindwings with ridge of fuscous-grey hairs on stalk of veins 6 and 7 .. *aridaria* 6
9. Posterior tibiae more or less dilated with internal groove and tuft of hairs .... *ophla* 10; *caronia* 9; *staurotis* 7
   Posterior tibiae not dilated, without groove and tuft .... *curtaria* 13; *pseudophaes* 8

1. NEARCHA URSARIA

Panagra ursaria Gn., *Lep.*, x, 129.—*Nearcha oxyptera* Low., *Trans. Roy. Soc. S. Aust.*, 1903, 188.

♂. 40-45 mm. Head whitish-grey; face blackish. Palpi 3½; blackish, base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax and abdomen whitish-grey. Legs grey; posterior pair whitish; posterior tibiae in ♂ dilated, with internal groove and tuft. Forewings triangular, costa nearly straight, apex acute and produced, termen sinuate, oblique; on underside with a dense high ridge of pale hairs on lower margin of cell, with smaller ridges on veins 2 to 6 towards their origin, vein 2 abruptly bent in middle; pale grey or whitish-ochreous-grey with slight fuscous irroration; first line indicated by three minute dots or absent; a median, subcostal, fuscous, pale-centred, discal dot, rarely absent; postmedian line from three-fourths costa to two-thirds dorsum, doubly sinuate, more or less suffusedly developed, fuscous often mixed with ferruginous, often obsolete towards costa; a terminal series of blackish dots; cilia ochreous-whitish or grey-whitish. Hindwings with termen nearly straight, apex and tornus rounded; on underside with a ridge of pale hairs on base of vein 12, dense tufts of dark hairs on anterior margin of cell at middle and end, a ridge of pale hairs on posterior margin of distal part of cell and extending beyond cell, a small dark tuft on vein 2 near base; colour, terminal dots, and cilia as forewings; markings obsolete, sometimes traces of a transverse median line.

♀. 36-39 mm. Similar to ♂ except for sexual characters. Forewings with discal dot obsolete; postmedian line paler, more ferruginous.

The ♂ is easily distinguished. In the ♀ stress must be laid on the rather long palpi (3½), and the acute and produced apex of forewings with sinuate termen.

Queensland: Caloundra, Brisbane, Stradbroke Is., Coolangatta, Toowoomba. New South Wales: Sydney. Victoria: Melbourne, Ballarat.

Key Based on Secondary Sexual Characters of Male.

1. Hindwings with one or more tufts or ridges of fine hairs on under surface .. 2
   Hindwings without tufts or ridges beneath 9
2. Forewings with ridges of hairs on under surface .... *ursaria* 1
   Forewings without raised hairs beneath 3
3. Abdomen with fan-like lateral tufts on middle segments .... *benecristata* 2
   Abdomen without fan-like tufts 4
4. Hindwings with tuft of hair on posterior margin of cell .... *dasyzona* 3
   Hindwings without tuft on posterior margin of cell 5
5. Hindwings with tuft of hair on anterior margin of cell about middle 6
   Hindwings without tuft on anterior margin of cell about middle 8
6. Hindwings with two long ridges of pale hairs extending from cell to termen .... *nullata* 11
   Hindwings without such ridges 7
7. Hindwings with high ridge of hairs on posterior margin of distal half of cell .... *tristificata* 4
   Hindwings without ridge of hairs on posterior margin of cell ...... *buffalaria* 5
8. Hindwings with ridge of whitish-ochreous hairs on stalk of veins 6 and 7 .... *atyla* 12
   Hindwings with ridge of fuscous-grey hairs on stalk of veins 6 and 7 .. *aridaria* 6
9. Posterior tibiae more or less dilated with internal groove and tuft of hairs .... *ophla* 10; *caronia* 9; *staurotis* 7
   Posterior tibiae not dilated, without groove and tuft .... *curtaria* 13; *pseudophaes* 8

1. NEARCHA URSARIA

Panagra ursaria Gn., *Lep.*, x, 129.—*Nearcha oxyptera* Low., *Trans. Roy. Soc. S. Aust.*, 1903, 188.

♂. 40-45 mm. Head whitish-grey; face blackish. Palpi 3½; blackish, base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax and abdomen whitish-grey. Legs grey; posterior pair whitish; posterior tibiae in ♂ dilated, with internal groove and tuft. Forewings triangular, costa nearly straight, apex acute and produced, termen sinuate, oblique; on underside with a dense high ridge of pale hairs on lower margin of cell, with smaller ridges on veins 2 to 6 towards their origin, vein 2 abruptly bent in middle; pale grey or whitish-ochreous-grey with slight fuscous irroration; first line indicated by three minute dots or absent; a median, subcostal, fuscous, pale-centred, discal dot, rarely absent; postmedian line from three-fourths costa to two-thirds dorsum, doubly sinuate, more or less suffusedly developed, fuscous often mixed with ferruginous, often obsolete towards costa; a terminal series of blackish dots; cilia ochreous-whitish or grey-whitish. Hindwings with termen nearly straight, apex and tornus rounded; on underside with a ridge of pale hairs on base of vein 12, dense tufts of dark hairs on anterior margin of cell at middle and end, a ridge of pale hairs on posterior margin of distal part of cell and extending beyond cell, a small dark tuft on vein 2 near base; colour, terminal dots, and cilia as forewings; markings obsolete, sometimes traces of a transverse median line.

♀. 36-39 mm. Similar to ♂ except for sexual characters. Forewings with discal dot obsolete; postmedian line paler, more ferruginous.

The ♂ is easily distinguished. In the ♀ stress must be laid on the rather long palpi (3½), and the acute and produced apex of forewings with sinuate termen.

Queensland: Caloundra, Brisbane, Stradbroke Is., Coolangatta, Toowoomba. New South Wales: Sydney. Victoria: Melbourne, Ballarat.

2. NEARCHA BENECRISTATA.

Warr., *Novit. Zool.*, 1895, 83.

♂. 33-36 mm. Head whitish-grey; face blackish. Palpi 2; blackish, at base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax whitish-grey. Abdomen whitish-grey; in ♂ with two pairs of fan-like expansions of dark scales on lateral aspects about middle, terminal segments clothed with long pale hairs above. Legs grey; posterior pair whitish; posterior tibiae in ♂ dilated, with internal groove and tuft. Forewings triangular, costa straight, apex moderately pointed, termen moderately rounded, oblique; pale grey or whitish-grey with very few darker scales; first line represented by median and subdorsal fuscous dots; a median, subcostal, fuscous, pale-centred, discal dot; postmedian line faintly marked or obsolete towards costa, thickened or double and blackish towards dorsum, sinuate, without ferruginous tinge; sometimes a faintly indicated fuscous dentate subterminal line; a terminal series of minute dark fuscous dots; cilia pale grey. Hindwings with termen slightly rounded; on underside with a large dark tuft on anterior margin of cell about middle, and a smaller dark tuft at end, a pale ridge of hairs on posterior margin of distal half of cell, and a small tuft between veins 2 and 3 beyond middle; as forewings, but without markings, or with median transverse line only.

♀. 30-34 mm. Differs from ♂ not only in sexual characters, but also in the very slightly developed postmedian line of forewings without any thickening towards costa.

The ♂ is very distinct. For recognition of the ♀, reliance must be placed on the short palpi (2), pale colouring of forewings, and absence of any ferruginous tinge in postmedian line.

North Queensland: Thursday Is., Cape York, Herberton. Queensland: Caloundra, Brisbane, Stradbroke Is.

3. NEARCHA DASYZONA.

Taxeotis dasyzona Low., *Trans. Roy. Soc. S. Aust.*, 1903, 185.—*Nearcha agnata* Prout, *Novit. Zool.*, 1913, 389.

♂. 32-36 mm. Head whitish-grey; face blackish. Palpi 2½; blackish, base sharply white. Antennae pale grey; pectinations in ♂ 4. Thorax and abdomen pale grey with a few fuscous scales. Legs whitish irrorated with fuscous; anterior pair grey. Forewings triangular, costa nearly straight, apex pointed, termen slightly rounded, moderately oblique; pale grey with a few scattered fuscous scales; first line obsolete, or represented by median and subdorsal fuscous dots, occasionally also by subcostal and dorsal dots; a median, subcostal, fuscous, discal dot, sometimes pale-centred; postmedian line from three-fourths costa to two-thirds dorsum, often obsolete towards costa, rather strongly sinuate, consisting of a series of dark fuscous dots, followed by a fine pale line, and this by a usually fuscous line sometimes wholly or partly ferruginous, either the first or last of these components may be wholly or partly obsolete; no subterminal dots; a terminal series of blackish dots; cilia grey, apices paler. Hindwings with termen slightly rounded; colour, terminal dots, and cilia as forewings; markings obsolete, or with a faint median transverse line; underside with a fuscous tuft on anterior margin of cell about middle, an ochreous tuft on posterior margin opposite this, a dense ridge of ochreous hairs around end of cell, and a small ridge between veins 3 and 4 near origin.

2. NEARCHA BENECRISTATA.

Warr., *Novit. Zool.*, 1895, 83.

♂. 33-36 mm. Head whitish-grey; face blackish. Palpi 2; blackish, at base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax whitish-grey. Abdomen whitish-grey; in ♂ with two pairs of fan-like expansions of dark scales on lateral aspects about middle, terminal segments clothed with long pale hairs above. Legs grey; posterior pair whitish; posterior tibiae in ♂ dilated, with internal groove and tuft. Forewings triangular, costa straight, apex moderately pointed, termen moderately rounded, oblique; pale grey or whitish-grey with very few darker scales; first line represented by median and subdorsal fuscous dots; a median, subcostal, fuscous, pale-centred, discal dot; postmedian line faintly marked or obsolete towards costa, thickened or double and blackish towards dorsum, sinuate, without ferruginous tinge; sometimes a faintly indicated fuscous dentate subterminal line; a terminal series of minute dark fuscous dots; cilia pale grey. Hindwings with termen slightly rounded; on underside with a large dark tuft on anterior margin of cell about middle, and a smaller dark tuft at end, a pale ridge of hairs on posterior margin of distal half of cell, and a small tuft between veins 2 and 3 beyond middle; as forewings, but without markings, or with median transverse line only.

♀. 30-34 mm. Differs from ♂ not only in sexual characters, but also in the very slightly developed postmedian line of forewings without any thickening towards costa.

The ♂ is very distinct. For recognition of the ♀, reliance must be placed on the short palpi (2), pale colouring of forewings, and absence of any ferruginous tinge in postmedian line.

North Queensland: Thursday Is., Cape York, Herberton. Queensland: Caloundra, Brisbane, Stradbroke Is.

3. NEARCHA DASYZONA.

Taxeotis dasyzona Low., *Trans. Roy. Soc. S. Aust.*, 1903, 185.—*Nearcha agnata* Prout, *Novit. Zool.*, 1913, 389.

♂. 32-36 mm. Head whitish-grey; face blackish. Palpi 2½; blackish, base sharply white. Antennae pale grey; pectinations in ♂ 4. Thorax and abdomen pale grey with a few fuscous scales. Legs whitish irrorated with fuscous; anterior pair grey. Forewings triangular, costa nearly straight, apex pointed, termen slightly rounded, moderately oblique; pale grey with a few scattered fuscous scales; first line obsolete, or represented by median and subdorsal fuscous dots, occasionally also by subcostal and dorsal dots; a median, subcostal, fuscous, discal dot, sometimes pale-centred; postmedian line from three-fourths costa to two-thirds dorsum, often obsolete towards costa, rather strongly sinuate, consisting of a series of dark fuscous dots, followed by a fine pale line, and this by a usually fuscous line sometimes wholly or partly ferruginous, either the first or last of these components may be wholly or partly obsolete; no subterminal dots; a terminal series of blackish dots; cilia grey, apices paler. Hindwings with termen slightly rounded; colour, terminal dots, and cilia as forewings; markings obsolete, or with a faint median transverse line; underside with a fuscous tuft on anterior margin of cell about middle, an ochreous tuft on posterior margin opposite this, a dense ridge of ochreous hairs around end of cell, and a small ridge between veins 3 and 4 near origin.

♀. 30-38 mm. Palpi 2½. Similar to ♂, but postmedian line of forewings less strongly marked.

The ♂ cannot be mistaken if the sexual tufts on hindwings are noted. The ♀ may be distinguished by the length of palpi and form of forewing, but in the latter it comes so near *tristificata* that the distinction is difficult. Lower's type is a ♀.

South Australia: Hoyleton (type *dasyzona*). Victoria: Daytrap near Sea Lake (one ♂ in Coll. Lyell). Queensland: Charleville (1 ♀). Western Australia: Perth, Waroona, Dowerin.

4. NEARCHA TRISTIFICATA.

Tephrina tristificata Wlk., *Cat. Brit. Mus.*, xxiii, 967.—*Panagra transactaria* Wlk., *ibid.*, 999.—*Panagra resignata* Wlk., *ibid.*, 1003.—*Nearcha prosedra* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 226.

♂. 30-36 mm. Head grey; face blackish. Palpi 2½ to 2¾; blackish, base sharply white. Antennae grey; pectinations in ♂ 5. Thorax and abdomen grey. Legs grey; posterior pair whitish irrorated with grey; middle femora of ♂ with sub-basal and subapical tufts of hair; posterior tibiae of ♂ dilated, with internal groove and tuft. Forewings triangular, costa very slightly arched, apex acute and slightly produced, termen sinuate, oblique; grey sometimes with slight fuscous irroration; first line obsolete, or represented by three dark fuscous dots, which are sometimes preceded by a pale line; a median, subcostal, fuscous, usually pale-centred, discal spot; postmedian line from four-fifths costa to three-fourths dorsum, usually obsolete towards costa, strongly sinuate, represented by a series of dark fuscous dots, succeeded by a pale line, which is sometimes edged with a more or less suffused fuscous line, rarely any ferruginous tinge; no subterminal line; a terminal series of dark fuscous dots; cilia grey. Hindwings with termen gently rounded; on underside a large dense tuft on anterior margin of cell about middle, and a second smaller on end of cell, a ridge of hairs on posterior margin of distal half of cell; grey; usually a fine, dark, slightly curved, median, transverse line, followed by a pale line, but one or both may be obsolete; terminal dots and cilia as forewings.

♀. 29-34 mm. Palpi 2½ to 2¾. Forewings with fuscous dots of postmedian line usually absent, very small when present, but pale following line always present, and sometimes with a darker posterior suffused edge.

Though nearly allied to *buffalaria*, the ♂ is easily distinguished. In the ♀ reliance must be placed on the grey colouring without ochreous tinge, the slightly longer palpi, and the usual absence of any ferruginous tinge in postmedian line.

Queensland: Caloundra, Stradbroke Is., Southport, Coolangatta, Toowoomba, Dalby. New South Wales: Sydney, National Park, Jervis Bay, Katoomba.

5. NEARCHA BUFFALARIA.

Panagra buffalaria Gn., *Lep.*, x, 128.

♂. 33-37 mm. Head pale-ochreous-grey; face blackish. Palpi 2 to 2¼; blackish, base sharply white. Antennae grey-whitish; pectinations in ♂ 4. Thorax and abdomen pale grey, more or less ochreous-tinged. Legs ochreous-whitish irrorated with grey; anterior pair grey; middle femora fringed with long hairs throughout; posterior tibiae dilated with internal groove and tuft. Forewings triangular, costa nearly straight, apex acute, termen gently rounded, moderately oblique; pale grey more or less ochreous-tinged with slight darker irroration; costal edge pale

♀. 30-38 mm. Palpi 2½. Similar to ♂, but postmedian line of forewings less strongly marked.

The ♂ cannot be mistaken if the sexual tufts on hindwings are noted. The ♀ may be distinguished by the length of palpi and form of forewing, but in the latter it comes so near *tristificata* that the distinction is difficult. Lower's type is a ♀.

South Australia: Hoyleton (type *dasyzona*). Victoria: Daytrap near Sea Lake (one ♂ in Coll. Lyell). Queensland: Charleville (1 ♀). Western Australia: Perth, Waroona, Dowerin.

4. NEARCHA TRISTIFICATA.

Tephrina tristificata Wlk., *Cat. Brit. Mus.*, xxiii, 967.—*Panagra transactaria* Wlk., *ibid.*, 999.—*Panagra resignata* Wlk., *ibid.*, 1003.—*Nearcha prosedra* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 226.

♂. 30-36 mm. Head grey; face blackish. Palpi 2½ to 2¾; blackish, base sharply white. Antennae grey; pectinations in ♂ 5. Thorax and abdomen grey. Legs grey; posterior pair whitish irrorated with grey; middle femora of ♂ with sub-basal and subapical tufts of hair; posterior tibiae of ♂ dilated, with internal groove and tuft. Forewings triangular, costa very slightly arched, apex acute and slightly produced, termen sinuate, oblique; grey sometimes with slight fuscous irroration; first line obsolete, or represented by three dark fuscous dots, which are sometimes preceded by a pale line; a median, subcostal, fuscous, usually pale-centred, discal spot; postmedian line from four-fifths costa to three-fourths dorsum, usually obsolete towards costa, strongly sinuate, represented by a series of dark fuscous dots, succeeded by a pale line, which is sometimes edged with a more or less suffused fuscous line, rarely any ferruginous tinge; no subterminal line; a terminal series of dark fuscous dots; cilia grey. Hindwings with termen gently rounded; on underside a large dense tuft on anterior margin of cell about middle, and a second smaller on end of cell, a ridge of hairs on posterior margin of distal half of cell; grey; usually a fine, dark, slightly curved, median, transverse line, followed by a pale line, but one or both may be obsolete; terminal dots and cilia as forewings.

♀. 29-34 mm. Palpi 2½ to 2¾. Forewings with fuscous dots of postmedian line usually absent, very small when present, but pale following line always present, and sometimes with a darker posterior suffused edge.

Though nearly allied to *buffalaria*, the ♂ is easily distinguished. In the ♀ reliance must be placed on the grey colouring without ochreous tinge, the slightly longer palpi, and the usual absence of any ferruginous tinge in postmedian line.

Queensland: Caloundra, Stradbroke Is., Southport, Coolangatta, Toowoomba, Dalby. New South Wales: Sydney, National Park, Jervis Bay, Katoomba.

5. NEARCHA BUFFALARIA.

Panagra buffalaria Gn., *Lep.*, x, 128.

♂. 33-37 mm. Head pale-ochreous-grey; face blackish. Palpi 2 to 2¼; blackish, base sharply white. Antennae grey-whitish; pectinations in ♂ 4. Thorax and abdomen pale grey, more or less ochreous-tinged. Legs ochreous-whitish irrorated with grey; anterior pair grey; middle femora fringed with long hairs throughout; posterior tibiae dilated with internal groove and tuft. Forewings triangular, costa nearly straight, apex acute, termen gently rounded, moderately oblique; pale grey more or less ochreous-tinged with slight darker irroration; costal edge pale brownish-ochreous; first line represented by two or three dark fuscous dots; a median, subcostal, fuscous, pale-centred, discal spot; postmedian line from four-fifths costa to three-fourths dorsum, sometimes obsolete on costa, sinuate, represented by a series of dark fuscous dots, followed by a pale line, and this by a fuscous-ferruginous line, occasionally the fuscous dots or the pale line not developed; usually a subterminal series of suffused fuscous dots or spots, sometimes very distinct; a terminal series of blackish dots; cilia pale ochreous-grey. Hindwings with termen gently rounded; underside with dark tufts on anterior edge of cell about middle and end, no ridge of scales on posterior edge of cell; colour as forewings; sometimes without markings, but usually with a fine, fuscous, transverse, median line.

♀. 32-36 mm. Palpi 2 to 2½. Forewings with apex slightly produced; first line obsolete; discal spot faintly marked, rarely obsolete; postmedian line without dark fuscous dots, ferruginous suffusion usually well marked.

There is no doubt that Guenée's description refers to this species, but Meyrick's (PROC. LINN. SOC. N.S.W., 1889, 1154) is based on a confusion of several species.

North Queensland: Cairns, Herberton. Queensland: Gympie, Brisbane, Toowoomba, Warwick, Stanthorpe. New South Wales: Ebor, Port Macquarie.

6. NEARCHA ARIDARIA.

Tephrina aridaria Wlk., *Cat. Brit. Mus.*, xxxv, 1662.—*Nearcha aridaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1155.

♂. 24-32 mm. Head whitish-grey; face blackish. Palpi 2; blackish, base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax and abdomen pale grey. Legs pale grey; posterior pair whitish with fuscous irroration; posterior tibiae dilated, with internal groove and tuft. Forewings triangular, costa straight, slightly arched towards apex, apex acute, termen slightly rounded, moderately oblique; pale grey, with fine sparse darker irroration; first line from one-third costa to one-third dorsum, sometimes continuous, but usually reduced to a variable number of dots; a median, subdorsal, fuscous, usually pale-centred, discal dot or spot; postmedian line from two-thirds costa to two-thirds dorsum, sinuate, upper part strongly bowed outwards, sometimes continuous, usually reduced to a series of fuscous dots variably developed, sometimes followed by a fine ferruginous line; sometimes some very indistinct subterminal spots; sometimes a series of blackish terminal dots; cilia pale grey. Hindwings with termen gently rounded; on underside a tuft of dark hairs on stalk of veins 6 and 7; colour, terminal dots, and cilia as forewings; discal dot usually obsolete above, but distinct beneath; a fine median transverse line slightly developed, or obsolete.

♀. 30-32 mm. Palpi 2¼. Wings a darker grey; markings ill-defined; postmedian line may be absent.

Apart from the characters of the ♂, this species may be distinguished by the short palpi, uniform grey irroration, and strongly bowed postmedian line.

Queensland: Duaringa, Clermont, Warwick. New South Wales: Murrurundi, National Park, Bathurst. Victoria: Sea Lake.

7. NEARCHA STAUROTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1153.—*Nearcha nephrocrossa* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 227.—*Nearcha recisa* Prout, *Gen. Insect.* Oenochrom., p. 30.

♂. Eastern Australian examples 26-36 mm.; Western Australian examples brownish-ochreous; first line represented by two or three dark fuscous dots; a median, subcostal, fuscous, pale-centred, discal spot; postmedian line from four-fifths costa to three-fourths dorsum, sometimes obsolete on costa, sinuate, represented by a series of dark fuscous dots, followed by a pale line, and this by a fuscous-ferruginous line, occasionally the fuscous dots or the pale line not developed; usually a subterminal series of suffused fuscous dots or spots, sometimes very distinct; a terminal series of blackish dots; cilia pale ochreous-grey. Hindwings with termen gently rounded; underside with dark tufts on anterior edge of cell about middle and end, no ridge of scales on posterior edge of cell; colour as forewings; sometimes without markings, but usually with a fine, fuscous, transverse, median line.

♀. 32-36 mm. Palpi 2 to 2½. Forewings with apex slightly produced; first line obsolete; discal spot faintly marked, rarely obsolete; postmedian line without dark fuscous dots, ferruginous suffusion usually well marked.

There is no doubt that Guenée's description refers to this species, but Meyrick's (PROC. LINN. SOC. N.S.W., 1889, 1154) is based on a confusion of several species.

North Queensland: Cairns, Herberton. Queensland: Gympie, Brisbane, Toowoomba, Warwick, Stanthorpe. New South Wales: Ebor, Port Macquarie.

6. NEARCHA ARIDARIA.

Tephrina aridaria Wlk., *Cat. Brit. Mus.*, xxxv, 1662.—*Nearcha aridaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1155.

♂. 24-32 mm. Head whitish-grey; face blackish. Palpi 2; blackish, base sharply white. Antennae whitish-grey; pectinations in ♂ 5. Thorax and abdomen pale grey. Legs pale grey; posterior pair whitish with fuscous irroration; posterior tibiae dilated, with internal groove and tuft. Forewings triangular, costa straight, slightly arched towards apex, apex acute, termen slightly rounded, moderately oblique; pale grey, with fine sparse darker irroration; first line from one-third costa to one-third dorsum, sometimes continuous, but usually reduced to a variable number of dots; a median, subdorsal, fuscous, usually pale-centred, discal dot or spot; postmedian line from two-thirds costa to two-thirds dorsum, sinuate, upper part strongly bowed outwards, sometimes continuous, usually reduced to a series of fuscous dots variably developed, sometimes followed by a fine ferruginous line; sometimes some very indistinct subterminal spots; sometimes a series of blackish terminal dots; cilia pale grey. Hindwings with termen gently rounded; on underside a tuft of dark hairs on stalk of veins 6 and 7; colour, terminal dots, and cilia as forewings; discal dot usually obsolete above, but distinct beneath; a fine median transverse line slightly developed, or obsolete.

♀. 30-32 mm. Palpi 2¼. Wings a darker grey; markings ill-defined; postmedian line may be absent.

Apart from the characters of the ♂, this species may be distinguished by the short palpi, uniform grey irroration, and strongly bowed postmedian line.

Queensland: Duaringa, Clermont, Warwick. New South Wales: Murrurundi, National Park, Bathurst. Victoria: Sea Lake.

7. NEARCHA STAUROTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1153.—*Nearcha nephrocrossa* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 227.—*Nearcha recisa* Prout, *Gen. Insect.* Oenochrom., p. 30.

♂. Eastern Australian examples 26-36 mm.; Western Australian examples

30-40 mm. Head grey-whitish; face blackish. Palpi 2 to 2¼; blackish, base sharply white. Antennae grey-whitish; pectinations grey, very long (8). Thorax, abdomen and legs pale grey; posterior tibiae slightly dilated with internal groove. Forewings triangular, costa very slightly arched, apex pointed, termen slightly rounded, slightly oblique; pale grey; first line from one-fourth costa to one-third dorsum, represented by three or four fuscous dots, rarely connected, sometimes partly ferruginous, rarely obsolete; a median, subdorsal, fuscous, usually pale-centred, discal dot or spot; postmedian line from two-thirds costa to two-thirds dorsum, outwardly rounded, not or scarcely sinuate, represented by a series of dark fuscous dots, rarely connected, followed by a pale line, and this sometimes by a fuscous suffusion, which may be rather broad with a crenulate outer edge, occasionally partly ferruginous; a terminal series of blackish dots; cilia pale grey. Hindwings with termen rounded; colour, terminal dots, and cilia as forewings; a fine fuscous median transverse line or series of dots, sometimes followed by a whitish line.

♀. Eastern Australian examples 30-34 mm.; Western Australian examples 36 mm. Similar to ♂, but markings usually less defined.

This species is variable both in markings and size. Specimens from Cape York are unusually small; those from Western Australia often large.

N. nephrocrossa is a unique aberration with lines almost wholly whitish, and a pale terminal band with crenulate inner edge. One ♂ from Cape York has the two lines connected by blackish streaks; another from Herberton has the markings nearly obsolete.

North Queensland: Prince of Wales Island, Thursday Island, Cape York, Herberton. Queensland: Bundaberg, Brisbane, Mt. Tambourine, Coolangatta, Warwick, Stanthorpe. New South Wales: Lismore, Tabulam. Western Australia: Perth, Waroona, Bridgetown, Yallingup, Geraldton.

8. NEARCHA PSEUDOPHAES.

Low., *Trans. Roy. Soc. S. Aust.*, 1893, 155.—*Nearcha uncta* Prout, *Novit. Zool.*, 1913, 389.

♂. 30-35 mm. Head ochreous-whitish, sometimes pale grey; face blackish. Palpi 2½ to 2¾ blackish, base sharply white. Antennae ochreous-whitish; pectinations grey, very long (10). Thorax and abdomen pale grey or grey. Legs pale grey; posterior tibiae not dilated. Forewings triangular, costa straight, or slightly sinuate, gently arched towards apex, apex pointed, termen gently rounded, slightly oblique; pale grey or grey, sometimes with darker irroration; first line from one-fourth costa to one-third dorsum, represented by three or four blackish dots preceded by a pale line; a median, subcostal, fuscous, usually pale-centred, discal spot; postmedian line from three-fourths costa to three-fourths dorsum, sinuate, usually obsolete towards costa, represented by a series of blackish dots, each edged posteriorly with whitish, succeeded usually by a ferruginous line; sometimes a suffused pale subterminal line; a terminal series of blackish dots; cilia pale grey or grey. Hindwings with apex and tornus rounded, termen nearly straight; pale grey; terminal dots and cilia as forewings.

Variable; in one example in Coll. Lyell the blackish dots on both lines of forewing have disappeared and are replaced by whitish dots; this form has been described as *uncta* Prout.

Victoria: Blackrock near Melbourne. South Australia: Mt. Lofty. Western Australia: Perth, Kelmscott.

30-40 mm. Head grey-whitish; face blackish. Palpi 2 to 2¼; blackish, base sharply white. Antennae grey-whitish; pectinations grey, very long (8). Thorax, abdomen and legs pale grey; posterior tibiae slightly dilated with internal groove. Forewings triangular, costa very slightly arched, apex pointed, termen slightly rounded, slightly oblique; pale grey; first line from one-fourth costa to one-third dorsum, represented by three or four fuscous dots, rarely connected, sometimes partly ferruginous, rarely obsolete; a median, subdorsal, fuscous, usually pale-centred, discal dot or spot; postmedian line from two-thirds costa to two-thirds dorsum, outwardly rounded, not or scarcely sinuate, represented by a series of dark fuscous dots, rarely connected, followed by a pale line, and this sometimes by a fuscous suffusion, which may be rather broad with a crenulate outer edge, occasionally partly ferruginous; a terminal series of blackish dots; cilia pale grey. Hindwings with termen rounded; colour, terminal dots, and cilia as forewings; a fine fuscous median transverse line or series of dots, sometimes followed by a whitish line.

♀. Eastern Australian examples 30-34 mm.; Western Australian examples 36 mm. Similar to ♂, but markings usually less defined.

This species is variable both in markings and size. Specimens from Cape York are unusually small; those from Western Australia often large.

N. nephrocrossa is a unique aberration with lines almost wholly whitish, and a pale terminal band with crenulate inner edge. One ♂ from Cape York has the two lines connected by blackish streaks; another from Herberton has the markings nearly obsolete.

North Queensland: Prince of Wales Island, Thursday Island, Cape York, Herberton. Queensland: Bundaberg, Brisbane, Mt. Tambourine, Coolangatta, Warwick, Stanthorpe. New South Wales: Lismore, Tabulam. Western Australia: Perth, Waroona, Bridgetown, Yallingup, Geraldton.

8. NEARCHA PSEUDOPHAES.

Low., *Trans. Roy. Soc. S. Aust.*, 1893, 155.—*Nearcha uncta* Prout, *Novit. Zool.*, 1913, 389.

♂. 30-35 mm. Head ochreous-whitish, sometimes pale grey; face blackish. Palpi 2½ to 2¾ blackish, base sharply white. Antennae ochreous-whitish; pectinations grey, very long (10). Thorax and abdomen pale grey or grey. Legs pale grey; posterior tibiae not dilated. Forewings triangular, costa straight, or slightly sinuate, gently arched towards apex, apex pointed, termen gently rounded, slightly oblique; pale grey or grey, sometimes with darker irroration; first line from one-fourth costa to one-third dorsum, represented by three or four blackish dots preceded by a pale line; a median, subcostal, fuscous, usually pale-centred, discal spot; postmedian line from three-fourths costa to three-fourths dorsum, sinuate, usually obsolete towards costa, represented by a series of blackish dots, each edged posteriorly with whitish, succeeded usually by a ferruginous line; sometimes a suffused pale subterminal line; a terminal series of blackish dots; cilia pale grey or grey. Hindwings with apex and tornus rounded, termen nearly straight; pale grey; terminal dots and cilia as forewings.

Variable; in one example in Coll. Lyell the blackish dots on both lines of forewing have disappeared and are replaced by whitish dots; this form has been described as *uncta* Prout.

Victoria: Blackrock near Melbourne. South Australia: Mt. Lofty. Western Australia: Perth, Kelmscott.

9. NEARCHA CARONIA.

Swin., *Trans. Ent. Soc.*, 1902, 641.

♂ ♀. 26-28 mm. Head grey-whitish. Palpi 1⅔; dark fuscous, lower surface sharply white. Antennae grey-whitish; pectinations in ♂ 10, grey. Thorax and abdomen pale grey. Legs pale grey; posterior pair grey-whitish. Forewings triangular, costa straight nearly to apex, apex round-pointed, termen slightly rounded, oblique; pale grey sparsely irrorated with dark fuscous; markings dark fuscous; a short erect mark on one-third dorsum, sometimes obsolete, sometimes followed by a median dot; a small pale-centred discal spot beneath midcosta; a finely denticulate sinuate line from three-fourths costa to two-thirds termen, suffusedly edged with whitish posteriorly, sometimes nearly obsolete; a terminal series of dots; cilia pale grey. Hindwings with termen gently rounded; without tufts or raised scales beneath in ♂; as forewings but with no trace of first line. Underside similar but paler and less defined.

Allied to *N. staurotis* and *N. ophla*. It is considerably smaller and has shorter palpi than the former, and with the postmedian line starting from three-fourths and not two-thirds costa, and differently formed. The latter has a whiter head, forewings rather more elongate, with more curvature in the termen, and often develops a subterminal crenulate whitish line. All three species are variable.

North Australia: Darwin (Swinhoe's type). North-west Australia: Parry and Queen Islands (J. J. Walker); a series including the type in the British Museum.

10. NEARCHA OPHLA.

Swin., *Ann. Mag. Nat. Hist.* (7), ix, 1902, 79; Prout, *Gen. Insect.*, Oenochrom., Pl. 1, f. 15.—*Nearcha pseudophaes* Warr., *Novit. Zool.*, 1902, 349, *nec* Lower.—*Nearcha anemodes* Low., *Trans. Roy. Soc. S. Aust.*, 1902, 227.—*Nearcha pyrosema* Low,. *ibid.*, 1903, 188.

♂. 28-30 mm. ♀. 27-34 mm. Head ochreous-whitish; face blackish. Palpi 1½; blackish, base sharply white. Antennae ochreous-whitish; pectinations in ♂ grey, very long (10). Thorax and abdomen whitish-ochreous, sometimes tinged with reddish. Legs ochreous-whitish; anterior pair pale grey; posterior tibiae in ♂ dilated with internal groove and tuft. Forewings triangular, costa straight almost to apex, apex pointed, termen slightly rounded, slightly oblique; whitish-ochreous, often reddish tinged, with sparse fuscous irroration; first line obsolete or faintly represented, sometimes reddish; a median, subdorsal, fuscous, pale-centred, discal dot; postmedian from two-thirds costa to two-thirds dorsum, continuous or dotted, fuscous or reddish, sometimes obsolete; sometimes a pale crenulate subterminal line; a terminal series of blackish dots; cilia ochreous-whitish. Hindwings with termen gently rounded; colour, terminal dots, and cilia as forewings; a discal dot and curved transverse median line sometimes present.

A desert form, the pale, often reddish, colouring being protective.

North Australia: Tennant's Creek. North-west Australia: Derby, Onslow, Roeburne, Sherlock River.

11. NEARCHA NULLATA.

Panagra nullata Gn., *Lep.*, x, 130.—*Panagra subcelata* Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Nearcha subcelata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1157.

♂. 30-34 mm. Head grey; face with strong anterior tuft. Palpi 4½; grey. Antennae grey-whitish; pectinations 4. Thorax grey. Abdomen whitish-grey. Legs grey; posterior pair whitish with some darker scales. Forewings triangular,

9. Nearcha caronia.

Swin., *Trans. Ent. Soc.*, 1902, 641.

♂ ♀. 26-28 mm. Head grey-whitish. Palpi 1⅔; dark fuscous, lower surface sharply white. Antennae grey-whitish; pectinations in ♂ 10, grey. Thorax and abdomen pale grey. Legs pale grey; posterior pair grey-whitish. Forewings triangular, costa straight nearly to apex, apex round-pointed, termen slightly rounded, oblique; pale grey sparsely irrorated with dark fuscous; markings dark fuscous; a short erect mark on one-third dorsum, sometimes obsolete, sometimes followed by a median dot; a small pale-centred discal spot beneath midcosta; a finely denticulate sinuate line from three-fourths costa to two-thirds termen, suffusedly edged with whitish posteriorly, sometimes nearly obsolete; a terminal series of dots; cilia pale grey. Hindwings with termen gently rounded; without tufts or raised scales beneath in ♂; as forewings but with no trace of first line. Underside similar but paler and less defined.

Allied to *N. staurotis* and *N. ophla.* It is considerably smaller and has shorter palpi than the former, and with the postmedian line starting from three-fourths and not two-thirds costa, and differently formed. The latter has a whiter head, forewings rather more elongate, with more curvature in the termen, and often develops a subterminal crenulate whitish line. All three species are variable.

North Australia: Darwin (Swinhoe's type). North-west Australia: Parry and Queen Islands (J. J. Walker); a series including the type in the British Museum.

10. Nearcha ophla.

Swin., *Ann. Mag. Nat. Hist.* (7), ix, 1902, 79; Prout, *Gen. Insect.*, Oenochrom., Pl. 1, f. 15.—*Nearcha pseudophaes* Warr., *Novit. Zool.*, 1902, 349, *nec* Lower.—*Nearcha anemodes* Low., *Trans. Roy. Soc. S. Aust.*, 1902, 227.—*Nearcha pyrosema* Low,. *ibid.*, 1903, 188.

♂. 28-30 mm. ♀. 27-34 mm. Head ochreous-whitish; face blackish. Palpi 1½; blackish, base sharply white. Antennae ochreous-whitish; pectinations in ♂ grey, very long (10). Thorax and abdomen whitish-ochreous, sometimes tinged with reddish. Legs ochreous-whitish; anterior pair pale grey; posterior tibiae in ♂ dilated with internal groove and tuft. Forewings triangular, costa straight almost to apex, apex pointed, termen slightly rounded, slightly oblique; whitish-ochreous, often reddish tinged, with sparse fuscous irroration; first line obsolete or faintly represented, sometimes reddish; a median, subdorsal, fuscous, pale-centred, discal dot; postmedian from two-thirds costa to two-thirds dorsum, continuous or dotted, fuscous or reddish, sometimes obsolete; sometimes a pale crenulate subterminal line; a terminal series of blackish dots; cilia ochreous-whitish. Hindwings with termen gently rounded; colour, terminal dots, and cilia as forewings; a discal dot and curved transverse median line sometimes present.

A desert form, the pale, often reddish, colouring being protective.

North Australia: Tennant's Creek. North-west Australia: Derby, Onslow, Roeburne, Sherlock River.

11. Nearcha nullata.

Panagra nullata Gn., *Lep.*, x, 130.—*Panagra subcelata* Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Nearcha subcelata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1157.

♂. 30-34 mm. Head grey; face with strong anterior tuft. Palpi 4½; grey. Antennae grey-whitish; pectinations 4. Thorax grey. Abdomen whitish-grey. Legs grey; posterior pair whitish with some darker scales. Forewings triangular, costa gently arched, apex acute and slightly produced, termen slightly sinuate, oblique; grey-whitish sometimes with slight fuscous irroration; first line from one-fifth costa to one-third dorsum, represented by three or four dark fuscous dots, rarely obsolete; a subcostal, fuscous, pale-centred, discal dot rather before middle, rarely obsolete; postmedian line from four-fifths costa to two-thirds dorsum, nearly straight or slightly sinuate, represented by a series of dark fuscous dots, often pale-edged posteriorly, sometimes followed by a suffused median dark fuscous spot, rarely by a suffused line; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen rounded; on under side a very strong tuft of dark hairs on anterior margin of cell about middle, and two lines of long pale hairs, first from cell to apex, second from cell to termen on vein 6; colour, terminal dots, and cilia as forewings; sometimes with traces of a transverse median line.

♀. 26-34 mm. Palpi 5. Forewings with first line nearly or quite obsolete; discal dot often obsolete; postmedian line with dots minute or obsolete, succeeded by a pale line, and this by a suffused grey line.

Easily distinguished from all species except the next. Guenée's description agrees very well, assuming that his type is a ♀.

Queensland: Brisbane, Stradbroke Is., Coolangatta, Toowoomba. New South Wales: Newcastle, Sydney, Jervis Bay, Katoomba, Bathurst. Victoria: Beaconsfield, Warragul, Gisborne, Dunkeld.

12. NEARCHA ATYLA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1157.

♂. 33-36 mm. Head grey-whitish; face with a strong anterior tuft. Palpi 4; grey, upper surface grey-whitish. Antennae pale grey; pectinations 5. Thorax and abdomen whitish-grey. Legs grey; posterior pair grey-whitish; posterior tibiae dilated with internal groove and tuft. Forewings triangular, costa gently arched, apex acute and slightly produced, termen slightly sinuate, oblique; grey-whitish sometimes with slight fuscous irroration; first line from one-fifth costa to one-third dorsum, represented by three or four dark fuscous dots; a subcostal, fuscous, pale-centred discal dot rather before middle; postmedian line from four-fifths costa to two-thirds dorsum, nearly straight; represented by a series of dark fuscous dots, sometimes followed by a pale line, and this by a dark fuscous suffused median spot, but this is not always developed; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen rounded; on underside a short ridge of pale hairs on anterior margin of terminal end of cell extending on to the stalk of veins 6 and 7; pale grey; a terminal series of blackish dots; cilia pale grey.

♀. 34-36 mm. Palpi 4½. Forewings with first line nearly or quite obsolete; discal dot very faint; postmedian line with dots minute or absent, followed by a pale slightly ferruginous line, and this by a suffused grey line.

Very similar to *N. nullata.* The ♂ is readily distinguished; the ♀ may be known by the shorter palpi and whiter head and upper surface of palpi.

Western Australia: Perth, Waroona, Busselton, Albany.

13. NEARCHA CURTARIA.

Panagra curtaria Gn., *Lep.*, x, 129.—*Panagra corrogata* Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Nearcha curtaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1158.

♂. 34-38 mm. Head ochreous-whitish; face with strong anterior tuft. Palpi 4½; fuscous, upper surface ochreous-whitish, base beneath sharply white. Antennae costa gently arched, apex acute and slightly produced, termen slightly sinuate, oblique; grey-whitish sometimes with slight fuscous irroration; first line from one-fifth costa to one-third dorsum, represented by three or four dark fuscous dots, rarely obsolete; a subcostal, fuscous, pale-centred, discal dot rather before middle, rarely obsolete; postmedian line from four-fifths costa to two-thirds dorsum, nearly straight or slightly sinuate, represented by a series of dark fuscous dots, often pale-edged posteriorly, sometimes followed by a suffused median dark fuscous spot, rarely by a suffused line; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen rounded; on under side a very strong tuft of dark hairs on anterior margin of cell about middle, and two lines of long pale hairs, first from cell to apex, second from cell to termen on vein 6; colour, terminal dots, and cilia as forewings; sometimes with traces of a transverse median line.

♀. 26-34 mm. Palpi 5. Forewings with first line nearly or quite obsolete; discal dot often obsolete; postmedian line with dots minute or obsolete, succeeded by a pale line, and this by a suffused grey line.

Easily distinguished from all species except the next. Guenée's description agrees very well, assuming that his type is a ♀.

Queensland: Brisbane, Stradbroke Is., Coolangatta, Toowoomba. New South Wales: Newcastle, Sydney, Jervis Bay, Katoomba, Bathurst. Victoria: Beaconsfield, Warragul, Gisborne, Dunkeld.

12. NEARCHA ATYLA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1157.

♂. 33-36 mm. Head grey-whitish; face with a strong anterior tuft. Palpi 4; grey, upper surface grey-whitish. Antennae pale grey; pectinations 5. Thorax and abdomen whitish-grey. Legs grey; posterior pair grey-whitish; posterior tibiae dilated with internal groove and tuft. Forewings triangular, costa gently arched, apex acute and slightly produced, termen slightly sinuate, oblique; grey-whitish sometimes with slight fuscous irroration; first line from one-fifth costa to one-third dorsum, represented by three or four dark fuscous dots; a subcostal, fuscous, pale-centred discal dot rather before middle; postmedian line from four-fifths costa to two-thirds dorsum, nearly straight; represented by a series of dark fuscous dots, sometimes followed by a pale line, and this by a dark fuscous suffused median spot, but this is not always developed; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen rounded; on underside a short ridge of pale hairs on anterior margin of terminal end of cell extending on to the stalk of veins 6 and 7; pale grey; a terminal series of blackish dots; cilia pale grey.

♀. 34-36 mm. Palpi 4½. Forewings with first line nearly or quite obsolete; discal dot very faint; postmedian line with dots minute or absent, followed by a pale slightly ferruginous line, and this by a suffused grey line.

Very similar to *N. nullata*. The ♂ is readily distinguished; the ♀ may be known by the shorter palpi and whiter head and upper surface of palpi.

Western Australia: Perth, Waroona, Busselton, Albany.

13. NEARCHA CURTARIA.

Panagra curtaria Gn., *Lep.*, x, 129.—*Panagra corrogata* Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Nearcha curtaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1158.

♂. 34-38 mm. Head ochreous-whitish; face with strong anterior tuft. Palpi 4½; fuscous, upper surface ochreous-whitish, base beneath sharply white. Antennae grey-whitish; pectinations grey, rather long (6). Thorax and abdomen ochreous-whitish. Legs grey; posterior pair whitish with a few grey scales; posterior tibiae not dilated, without internal groove. Forewings triangular, costa gently arched, apex acute and slightly produced, termen nearly straight, oblique; ochreous-whitish with sparse fuscous irroration; first line from one-fourth costa to one-third dorsum, usually represented by three or four dark fuscous dots, rarely continuous; a median, subcostal, fuscous, pale-centred, discal dot; second line from three-fourths costa to two-thirds dorsum, sinuate, usually represented by a series of dark fuscous dots, rarely continuous and suffused, succeeded by a pale line, and this by a fuscous or fuscous-ferruginous line, sometimes reduced to a series of dots; a more or less developed, pale fuscous, subterminal line or series of spots, usually indistinct; a terminal series of blackish dots; cilia ochreous-whitish. Hindwings with termen straight, apex rather acutely pointed, tornus rounded-rectangular; whitish-grey; terminal dots and cilia as forewings.

♀. 34-38 mm. Palpi 4½ to 5. Forewings with markings less distinct, rarely obsolete.

Easily recognized by the peculiar shape of hindwings.

New South Wales: Sydney, Mt. Kosciusko (5,000 feet). Victoria: Melbourne, Beaconsfield. Tasmania: Hobart, Russell Falls, Georgetown, Launceston, Ulverstone, Strahan.

Genus 2. Taxeotis.

Meyr., Proc. Linn. Soc. N.S.W., 1889, 1140; Prout, *Gen. Insect.*, Oenochrom., p. 33.

Type, *T. intextata* Gn. (*nec* Meyr.).

Face smooth. Tongue present. Palpi moderate or rather long, porrect, thickened with more or less appressed or rough scales. Antennae of ♂ usually more or less distinctly laminate, sometimes almost simple, and shortly ciliated, rarely with longer cilia arising in tufts, or even from very short pectinations. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 anastomosing at a point with areole, or connected with it by a cross-bar, or free. Hindwings with 6 and 7 usually separate at origin, 7 arising from shortly before angle, but sometimes connate from angle, 12 approximated to cell to about middle, thence gradually diverging.

A natural genus. The presence or absence of a connection between the subcostal vein and the areole is usually, but not always, a constant specific character. As Meyrick remarks, the species are commonly very difficult to distinguish, being obscurely coloured, extremely similar, and at the same time variable. For these reasons an artificial key would be more likely to mislead than to help. I have found it necessary to redescribe all the species, and have indicated their distinctive characters. Particular attention should be given to the shape of the forewings, the form of the postmedian line, the length of the palpi, and the coloration of face and palpi. By the last character the species may be conveniently divided into groups.

1. Palpi blackish or dark fuscous with a sharply defined, clear white, basal area: *intextata, phricocyma, blechra, adelia, anthracopa, subvelaria, ochrosticta, epigypsa.*

grey-whitish; pectinations grey, rather long (6). Thorax and abdomen ochreous-whitish. Legs grey; posterior pair whitish with a few grey scales; posterior tibiae not dilated, without internal groove. Forewings triangular, costa gently arched, apex acute and slightly produced, termen nearly straight, oblique; ochreous-whitish with sparse fuscous irroration; first line from one-fourth costa to one-third dorsum, usually represented by three or four dark fuscous dots, rarely continuous; a median, subcostal, fuscous, pale-centred, discal dot; second line from three-fourths costa to two-thirds dorsum, sinuate, usually represented by a series of dark fuscous dots, rarely continuous and suffused, succeeded by a pale line, and this by a fuscous or fuscous-ferruginous line, sometimes reduced to a series of dots; a more or less developed, pale fuscous, subterminal line or series of spots, usually indistinct; a terminal series of blackish dots; cilia ochreous-whitish. Hindwings with termen straight, apex rather acutely pointed, tornus rounded-rectangular; whitish-grey; terminal dots and cilia as forewings.

♀. 34-38 mm. Palpi 4½ to 5. Forewings with markings less distinct, rarely obsolete.

Easily recognized by the peculiar shape of hindwings.

New South Wales: Sydney, Mt. Kosciusko (5,000 feet). Victoria: Melbourne, Beaconsfield. Tasmania: Hobart, Russell Falls, Georgetown, Launceston, Ulverstone, Strahan.

Genus 2. TAXEOTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1140; Prout, *Gen. Insect.*, Oenochrom., p. 33.

Type, *T. intextata* Gn. (*nec* Meyr.).

Face smooth. Tongue present. Palpi moderate or rather long, porrect, thickened with more or less appressed or rough scales. Antennae of ♂ usually more or less distinctly laminate, sometimes almost simple, and shortly ciliated, rarely with longer cilia arising in tufts, or even from very short pectinations. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 anastomosing at a point with areole, or connected with it by a cross-bar, or free. Hindwings with 6 and 7 usually separate at origin, 7 arising from shortly before angle, but sometimes connate from angle, 12 approximated to cell to about middle, thence gradually diverging.

A natural genus. The presence or absence of a connection between the subcostal vein and the areole is usually, but not always, a constant specific character. As Meyrick remarks, the species are commonly very difficult to distinguish, being obscurely coloured, extremely similar, and at the same time variable. For these reasons an artificial key would be more likely to mislead than to help. I have found it necessary to redescribe all the species, and have indicated their distinctive characters. Particular attention should be given to the shape of the forewings, the form of the postmedian line, the length of the palpi, and the coloration of face and palpi. By the last character the species may be conveniently divided into groups.

1. Palpi blackish or dark fuscous with a sharply defined, clear white, basal area: *intextata, phricocyma, blechra, adelia, anthracopa, subvelaria, ochrosticta, epigypsa.*

2. Palpi dark fuscous or ferruginous-fuscous, basal area more or less white, but not sharply defined or not clear white: *egenata. perlinearia, bigeminata, philodora.*

3. Palpi dark fuscous or blackish, sometimes ferruginous-fuscous: *acrothecta, oraula, goniogramma. holoscia, xanthogramma, eremophila, alloceros, orphnina, epigaea. compar. isomeris.*

4. Palpi pale-ferruginous, sometimes white at base: *phaeopa, exsectaria, mimela. stereospila, endela, aenigmatodes.*

5. Palpi with upper surface whitish: *exaereta.*

The first three species, all described by Meyrick, I have not seen.

14. TAXEOTIS PHILODORA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1151.

Differs from all other species by the absence of a discal dot on forewings.

Western Australia: Carnarvon.

15. TAXEOTIS EPIGYPSA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1149.

Something like *T. intermixtaria*, but with shorter palpi, forewings ochreous-whitish, with large black terminal dots.

South Australia: Quorn.

16. TAXEOTIS ISOMERIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1144.

Distinguished by the presence of two triangular black costal spots on forewing.

Western Australia: Albany.

17. TAXEOTIS INTEXTATA.

Panagra intextata Gn., *Lepid.*, x, 130.—*Panagra inconcisata* Wlk., *Cat. Brit. Mus.*, xxiii, 1003.—*Taxeotis delogramma* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1146.

♂. 24-30 mm. ♀. 24-28 mm. Head grey; face blackish. Palpi 1¾ to 2; blackish with a sharply defined white basal area. Antennae ochreous-grey-whitish becoming darker grey towards apex, basal half more or less annulated with dark fuscous; in ♂ shortly but distinctly laminate and shortly ciliated (½). Thorax and abdomen grey, occasionally with some dark fuscous irroration. Legs ochreous-grey-whitish irrorated with dark fuscous. Forewings triangular, costa nearly straight, apex acute and similar in both sexes, termen slightly sinuate, slightly oblique; 12 anastomosing at a point with areole (20 ♂, 7 ♀), or connected with areole by a cross-bar (47 ♂, 26 ♀); pale grey, in ♀ usually darker grey, with more or less fuscous irroration, which is often more pronounced on costa; first line from one-fourth costa to one-fourth dorsum, usually represented by three fuscous dots, costal, median, and subdorsal, sometimes by a more or less complete fuscous line, sometimes obsolete, usually so in ♀; a distinct, blackish, median, subcostal, discal dot; postmedian line from three-fourths costa, fuscous, very distinct on costa, often incomplete beneath costa, forming a moderately acute angle beneath costa, but this is often indistinct or undeveloped, thence doubly sinuate to three-fourths dorsum, excurved in middle, more or less ferruginous, and usually dotted with fuscous, sometimes closely followed by a fuscous line; a subterminal series of fuscous dots closely follows postmedian line, paired dots

2. Palpi dark fuscous or ferruginous-fuscous, basal area more or less white, but not sharply defined or not clear white: *egenata. perlinearia, bigeminata, philodora.*

3. Palpi dark fuscous or blackish, sometimes ferruginous-fuscous: *acrothecta, oraula, goniogramma. holoscia, xanthogramma, eremophila, alloceros, orphnina, epigaea. compar. isomeris.*

4. Palpi pale-ferruginous, sometimes white at base: *phaeopa, exsectaria, mimela. stereospila, endela, aenigmatodes.*

5. Palpi with upper surface whitish: *exaereta.*

The first three species, all described by Meyrick, I have not seen.

14. TAXEOTIS PHILODORA.

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Differs from all other species by the absence of a discal dot on forewings.

Western Australia: Carnarvon.

15. TAXEOTIS EPIGYPSA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1149.

Something like *T. intermixtaria*, but with shorter palpi, forewings ochreous-whitish, with large black terminal dots.

South Australia: Quorn.

16. TAXEOTIS ISOMERIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1144.

Distinguished by the presence of two triangular black costal spots on forewing.

Western Australia: Albany.

17. TAXEOTIS INTEXTATA.

Panagra intextata Gn., *Lepid.*, x, 130.—*Panagra inconcisata* Wlk., *Cat. Brit. Mus.*, xxiii, 1003.—*Taxeotis delogramma* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1146.

♂. 24-30 mm. ♀. 24-28 mm. Head grey; face blackish. Palpi 1¾ to 2; blackish with a sharply defined white basal area. Antennae ochreous-grey-whitish becoming darker grey towards apex, basal half more or less annulated with dark fuscous; in ♂ shortly but distinctly laminate and shortly ciliated (½). Thorax and abdomen grey, occasionally with some dark fuscous irroration. Legs ochreous-grey-whitish irrorated with dark fuscous. Forewings triangular, costa nearly straight, apex acute and similar in both sexes, termen slightly sinuate, slightly oblique; 12 anastomosing at a point with areole (20 ♂, 7 ♀), or connected with areole by a cross-bar (47 ♂, 26 ♀); pale grey, in ♀ usually darker grey, with more or less fuscous irroration, which is often more pronounced on costa; first line from one-fourth costa to one-fourth dorsum, usually represented by three fuscous dots, costal, median, and subdorsal, sometimes by a more or less complete fuscous line, sometimes obsolete, usually so in ♀; a distinct, blackish, median, subcostal, discal dot; postmedian line from three-fourths costa, fuscous, very distinct on costa, often incomplete beneath costa, forming a moderately acute angle beneath costa, but this is often indistinct or undeveloped, thence doubly sinuate to three-fourths dorsum, excurved in middle, more or less ferruginous, and usually dotted with fuscous, sometimes closely followed by a fuscous line; a subterminal series of fuscous dots closely follows postmedian line, paired dots above middle and above dorsum often enlarged; a terminal series of blackish dots well marked in ♂, less so or obsolete in ♀; cilia pale grey, a broad subbasal fuscous line usually very distinct, but occasionally absent. Hindwings with termen well rounded; as forewings, but without first line; postmedian line variably developed, sometimes reduced to a series of dots; subterminal line of dots indistinct or obsolete.

The most common and widely distributed species in the Eastern States. I have seen none from Western Australia. It is characterized by the acute apices of forewings, sinuate termen, pale grey coloration of ♂, usually ferruginous tinged postmedian line, which is angled beneath costa, thence doubly sinuate, and the conspicuous line in cilia, which last is, however, not invariable.

The name *intextata* was applied by Meyrick to the same species as *perlinearia* Wlk. Guenée's description does not seem to me to apply to that species and agrees better with *inconcisata*, but so doubtfully that I was inclined to regard his name as unidentifiable. The publication of a figure of Guenée's type by Oberthür (*Etudes Lep. Comp.*, xx, 1923) supports the latter identification. I have not indeed been able to see this figure, but accept Mr. L. B. Prout's judgment conveyed to me by letter.

Queensland: Duaringa, Caloundra, Brisbane, Stradbroke Island, Mt. Tambourine, Toowoomba, Dalby, Bunya Mts., Warwick, Stanthorpe. New South Wales: Glen Innes, Sydney, Katoomba, Mt. Wilson, Bathurst, Jenolan, Jervis Bay, Moruya. Victoria: Beechworth, Melbourne, Beaconsfield, Sale, Gisborne, Castlemaine, Dunkeld. Tasmania: Launceston, Deloraine, St. Helen's, Hobart. South Australia: Mt. Lofty. (? Western Australia: Albany, York.)

18. TAXEOTIS PHRICOCYMA, n. sp.

φρικοκυμος, with rippled wave.

♂. 21-23 mm. Head pale grey; face dark fuscous tinged with ferruginous. Palpi 2; dark fuscous sometimes tinged with ferruginous; beneath sharply white except at apex. Antennae grey or grey-whitish; in ♂ simple, very shortly ciliated. Thorax pale grey. Abdomen grey-whitish with a few fuscous scales. Legs grey-whitish; coxae and femora irrorated with fuscous. Forewings rather broadly triangular, costa very slightly arched, apex rather acutely pointed, termen slightly rounded, slightly oblique; 12 connected with areole by a cross-bar (5 ♂); whitish with sparsely scattered blackish scales and a few pale grey, transverse strigulae; first line fuscous, from one-fourth costa to one-fourth dorsum, straight, rather broadly suffused, interrupted, or reduced to three dots; a median, subcostal, dark fuscous, discal dot; postmedian line from three-fourths costa, slender, interrupted, twice waved outwards, first beneath costa, then below middle, thence curved inwards to three-fourths dorsum, sometimes partly double, sometimes ferruginous-tinged; a subterminal series of fuscous dots sometimes faintly indicated; a terminal series of blackish dots, usually conspicuous; cilia whitish mixed with grey, which tends to form two faint lines. Hindwings with termen rounded; without first line and discal dot; second line double, but developed only towards dorsum.

A small species with peculiarly formed postmedian line.

Western Australia: Bunbury, Perth, Busselton in October; five specimens received from Mr. L. J. Newman.

above middle and above dorsum often enlarged; a terminal series of blackish dots well marked in ♂, less so or obsolete in ♀; cilia pale grey, a broad subbasal fuscous line usually very distinct, but occasionally absent. Hindwings with termen well rounded; as forewings, but without first line; postmedian line variably developed, sometimes reduced to a series of dots; subterminal line of dots indistinct or obsolete.

The most common and widely distributed species in the Eastern States. I have seen none from Western Australia. It is characterized by the acute apices of forewings, sinuate termen, pale grey coloration of ♂, usually ferruginous tinged postmedian line, which is angled beneath costa, thence doubly sinuate, and the conspicuous line in cilia, which last is, however, not invariable.

The name *intextata* was applied by Meyrick to the same species as *perlinearia* Wlk. Guenée's description does not seem to me to apply to that species and agrees better with *inconcisata*, but so doubtfully that I was inclined to regard his name as unidentifiable. The publication of a figure of Guenée's type by Oberthür (*Etudes Lep. Comp.*, xx, 1923) supports the latter identification. I have not indeed been able to see this figure, but accept Mr. L. B. Prout's judgment conveyed to me by letter.

Queensland: Duaringa, Caloundra, Brisbane, Stradbroke Island, Mt. Tambourine, Toowoomba, Dalby, Bunya Mts., Warwick, Stanthorpe. New South Wales: Glen Innes, Sydney, Katoomba, Mt. Wilson, Bathurst, Jenolan, Jervis Bay, Moruya. Victoria: Beechworth, Melbourne, Beaconsfield, Sale, Gisborne, Castlemaine, Dunkeld. Tasmania: Launceston, Deloraine, St. Helen's, Hobart. South Australia: Mt. Lofty. (? Western Australia: Albany, York.)

18. TAXEOTIS PHRICOCYMA, n. sp.

φρικοκυμος, with rippled wave.

♂. 21-23 mm. Head pale grey; face dark fuscous tinged with ferruginous. Palpi 2; dark fuscous sometimes tinged with ferruginous; beneath sharply white except at apex. Antennae grey or grey-whitish; in ♂ simple, very shortly ciliated. Thorax pale grey. Abdomen grey-whitish with a few fuscous scales. Legs grey-whitish; coxae and femora irrorated with fuscous. Forewings rather broadly triangular, costa very slightly arched, apex rather acutely pointed, termen slightly rounded, slightly oblique; 12 connected with areole by a cross-bar (5 ♂); whitish with sparsely scattered blackish scales and a few pale grey, transverse strigulae; first line fuscous, from one-fourth costa to one-fourth dorsum, straight, rather broadly suffused, interrupted, or reduced to three dots; a median, subcostal, dark fuscous, discal dot; postmedian line from three-fourths costa, slender, interrupted, twice waved outwards, first beneath costa, then below middle, thence curved inwards to three-fourths dorsum, sometimes partly double, sometimes ferruginous-tinged; a subterminal series of fuscous dots sometimes faintly indicated; a terminal series of blackish dots, usually conspicuous; cilia whitish mixed with grey, which tends to form two faint lines. Hindwings with termen rounded; without first line and discal dot; second line double, but developed only towards dorsum.

A small species with peculiarly formed postmedian line.

Western Australia: Bunbury, Perth, Busselton in October; five specimens received from Mr. L. J. Newman.

19. Taxeotis blechra, n. sp.

βληχρος, feeble.

♂. 20-22 mm. ♀. 19-23 mm. Head grey; face blackish. Palpi 1½; blackish with a sharply defined white basal area. Antennae grey with some dark fuscous annulations towards base; in ♂ very slightly laminate, almost simple, minutely ciliated (¼). Thorax and abdomen grey. Legs fuscous; posterior pair grey-whitish with some fuscous irroration. Forewings triangular, costa very slightly arched, apex pointed but not acute, termen slightly rounded, slightly oblique; 12 anastomosing at a point with areole (1 ♂, 1 ♀), or connected with it by a bar (4 ♂); grey with a very few fuscous scales; costa sometimes strigulated with fuscous; first line represented by a fuscous costal dot at one-third, and median and subdorsal dots at one-fourth; a median, subcostal, fuscous, discal dot; postmedian line from a fuscous costal dot at two-thirds, usually disconnected, but, if developed, angled beneath costa, thence nearly straight or very slightly sinuate to three-fourths dorsum, usually reduced to a series of dots; a subterminal series of suffused fuscous dots sometimes developed; a terminal series of blackish dots; cilia grey, irrorated with fuscous except at apices. Hindwings with termen rounded; as forewings, but without first line; postmedian line curved, usually indistinct.

Smaller than *T. intextata*, with postmedian line almost straight, simple, and not ferruginous, and different antennal structure. *T. adelia* differs in the absence of costal and subterminal dots and the well defined continuous lines of forewing. In one example a whitish costal dot precedes first line and another follows postmedian line.

Western Australia: Kalamunda near Perth in December, Waroona in January; nine specimens received from Mr. W. B. Barnard.

20. Taxeotis adelia.

Prout, *Gen. Insect.*, Oenochrom., p. 35.

♂. 22-23 mm. ♀. 20-23 mm. Head grey or grey-whitish; face blackish. Palpi 2; blackish with a sharply defined basal white area. Antennae pale grey; in ♂ almost simple, very shortly ciliated. Legs pale grey, posterior pair whitish, with some fuscous irroration. Forewings triangular, costa straight, gently arched towards apex, apex pointed but not acute, termen gently rounded, slightly oblique; 12 anastomosing at a point with areole (1 ♀), or connected with it by a cross-bar (2 ♂, 1 ♀); pale grey with a few scattered fuscous scales; first line from one-fourth costa to one-fourth dorsum, slender, fuscous, sometimes incomplete or interrupted; a median, subcostal, dark fuscous, discal dot, larger in ♂; postmedian line slender, fuscous, from three-fourths costa, curved outwards, then angled and continued as a nearly straight, very slightly sinuate line to three-fourths dorsum; no subterminal line of dots; an interrupted, dark fuscous, terminal line, or series of dots; cilia pale grey with some fuscous irroration, sometimes a distinct postmedian fuscous line. Hindwings with termen rounded; as forewings, but without first line; postmedian line almost straight, becoming obsolete towards costa.

My material of this species is small, but sufficient to establish its distinctness. It is near *T. inconcisata*, but smaller, apex of forewings not acute, postmedian line simple and almost straight (in the latter it is rather strongly bisinuate), subterminal line obsolete. Mr. Prout describes the markings as ferruginous, and his examples apparently showed more strongly lined cilia.

19. Taxeotis blechra, n. sp.

βληχρος, feeble.

♂. 20-22 mm. ♀. 19-23 mm. Head grey; face blackish. Palpi 1½; blackish with a sharply defined white basal area. Antennae grey with some dark fuscous annulations towards base; in ♂ very slightly laminate, almost simple, minutely ciliated (¼). Thorax and abdomen grey. Legs fuscous; posterior pair grey-whitish with some fuscous irroration. Forewings triangular, costa very slightly arched, apex pointed but not acute, termen slightly rounded, slightly oblique; 12 anastomosing at a point with areole (1 ♂, 1 ♀), or connected with it by a bar (4 ♂); grey with a very few fuscous scales; costa sometimes strigulated with fuscous; first line represented by a fuscous costal dot at one-third, and median and subdorsal dots at one-fourth; a median, subcostal, fuscous, discal dot; postmedian line from a fuscous costal dot at two-thirds, usually disconnected, but, if developed, angled beneath costa, thence nearly straight or very slightly sinuate to three-fourths dorsum, usually reduced to a series of dots; a subterminal series of suffused fuscous dots sometimes developed; a terminal series of blackish dots; cilia grey, irrorated with fuscous except at apices. Hindwings with termen rounded; as forewings, but without first line; postmedian line curved, usually indistinct.

Smaller than *T. intextata*, with postmedian line almost straight, simple, and not ferruginous, and different antennal structure. *T. adelia* differs in the absence of costal and subterminal dots and the well defined continuous lines of forewing. In one example a whitish costal dot precedes first line and another follows postmedian line.

Western Australia: Kalamunda near Perth in December, Waroona in January; nine specimens received from Mr. W. B. Barnard.

20. Taxeotis adelia.

Prout, *Gen. Insect.*, Oenochrom., p. 35.

♂. 22-23 mm. ♀. 20-23 mm. Head grey or grey-whitish; face blackish. Palpi 2; blackish with a sharply defined basal white area. Antennae pale grey; in ♂ almost simple, very shortly ciliated. Legs pale grey, posterior pair whitish, with some fuscous irroration. Forewings triangular, costa straight, gently arched towards apex, apex pointed but not acute, termen gently rounded, slightly oblique; 12 anastomosing at a point with areole (1 ♀), or connected with it by a cross-bar (2 ♂, 1 ♀); pale grey with a few scattered fuscous scales; first line from one-fourth costa to one-fourth dorsum, slender, fuscous, sometimes incomplete or interrupted; a median, subcostal, dark fuscous, discal dot, larger in ♂; postmedian line slender, fuscous, from three-fourths costa, curved outwards, then angled and continued as a nearly straight, very slightly sinuate line to three-fourths dorsum; no subterminal line of dots; an interrupted, dark fuscous, terminal line, or series of dots; cilia pale grey with some fuscous irroration, sometimes a distinct postmedian fuscous line. Hindwings with termen rounded; as forewings, but without first line; postmedian line almost straight, becoming obsolete towards costa.

My material of this species is small, but sufficient to establish its distinctness. It is near *T. inconcisata*, but smaller, apex of forewings not acute, postmedian line simple and almost straight (in the latter it is rather strongly bisinuate), subterminal line obsolete. Mr. Prout describes the markings as ferruginous, and his examples apparently showed more strongly lined cilia.

Victoria: Gisborne in February; four specimens received from Mr. Geo. Lyell. I have also seen a ♀ (18 mm., in Coll. Lyell) from Daytrap near Sea Lake, Victoria, and 2 ♂, 1 ♀ (18-20 mm., W. H. Matthews and W. B. Barnard) from Perth, Western Australia, all of which I refer to this species.

21. TAXEOTIS ANTHRACOPA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1145.—? *Taxeotis pelopa* Meyr., *Trans. Ent. Soc. Lond.*, 1897, 377.

♂. 23-28 mm. ♀. 25-28 mm. Head grey, sometimes ochreous-whitish anteriorly; face blackish. Palpi 1½; blackish, sharply white towards base beneath. Antennae with basal third whitish or ochreous-whitish annulated with fuscous, thence grey; in ♂ very slightly laminate, shortly ciliated. Thorax, abdomen, and legs grey. Forewings triangular, costa in ♂ slightly and evenly arched, in ♀ nearly straight, apex pointed, more acute in ♀, termen slightly rounded, slightly oblique; 12 anastomosing at a point with areole (5 ♂, 3 ♀), or connected by a cross-bar (26 ♂, 6 ♀); pale grey, very sparsely irrorated with darker grey; costal edge usually narrowly ochreous; first line usually indicated by a median and a subdorsal fuscous dot, sometimes obsolete; a fuscous, median, subcostal, discal dot; postmedian represented by a series of fuscous dots from four-fifths costa to two-thirds dorsum, at first outwardly curved, then sinuate, rarely a connected line, in ♀ sometimes nearly obsolete, very rarely with a trace of ferruginous coloration; a faint subterminal series of dots sometimes developed in ♂, rarely larger and distinct, sometimes obsolete, usually obsolete in ♀; an interrupted blackish terminal line or series of dots; cilia pale grey. Hindwings with termen rounded; as forewings, but without basal line; discal dot present; subterminal dots rarely developed.

Differs from *T. intextata* in the more uniform grey coloration, usually ochreous-edged costa, differently formed postmedian line, which is rounded, not angled, beneath costa, and the much simpler postmedian markings, together with absence of any line in cilia.

Queensland: Caloundra, Brisbane, Stradbroke Island, Southport, Coolangatta, Toowoomba, Stanthorpe. New South Wales: Sydney, Jervis Bay, Katoomba, Mt. Wilson, Mittagong. Victoria: Melbourne, Beaconsfield, Gembrook, Castlemaine. Tasmania: Deloraine, Hobart.

22. TAXEOTIS INTERMIXTARIA.

Panagra intermixtaria Wlk., *Cat. Brit. Mus.*, xxiii, 1000.—*Panagra promelanaria* Wlk., *ibid.*, xxvi, 1666.—*Taxeotis intermixtaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1149.

♂. 26-32 mm. ♀. 25-26 mm. Head ochreous-grey-whitish; face dark fuscous. Palpi in ♂ 2½, in ♀ 3; dark fuscous, beneath white except at apex, sharply defined. Antennae pale grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen pale grey. Legs grey. Forewings triangular, costa slightly and evenly arched, apex moderately pointed, not acute, termen moderately rounded, slightly oblique; 12 anastomosing at a point with areole (3 ♂, 2 ♀), or connected with areole by a cross-bar (5 ♂, 2 ♀); pale grey very sparsely irrorated with fuscous scales, rather more so in ♀; a fuscous dot above dorsum at one-third, another in disc at one-fourth, and sometimes another on costa at one-third, representing first line; a small, median, subcostal, fuscous, discal dot; a fuscous dot on costa at three-fourths, Victoria: Gisborne in February; four specimens received from Mr. Geo. Lyell. I have also seen a ♀ (18 mm., in Coll. Lyell) from Daytrap near Sea Lake, Victoria, and 2 ♂, 1 ♀ (18-20 mm., W. H. Matthews and W. B. Barnard) from Perth, Western Australia, all of which I refer to this species.

21. TAXEOTIS ANTHRACOPA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1145.—? *Taxeotis pelopa* Meyr., *Trans. Ent. Soc. Lond.*, 1897, 377.

♂. 23-28 mm. ♀. 25-28 mm. Head grey, sometimes ochreous-whitish anteriorly; face blackish. Palpi 1½; blackish, sharply white towards base beneath. Antennae with basal third whitish or ochreous-whitish annulated with fuscous, thence grey; in ♂ very slightly laminate, shortly ciliated. Thorax, abdomen, and legs grey. Forewings triangular, costa in ♂ slightly and evenly arched, in ♀ nearly straight, apex pointed, more acute in ♀, termen slightly rounded, slightly oblique; 12 anastomosing at a point with areole (5 ♂, 3 ♀), or connected by a cross-bar (26 ♂, 6 ♀); pale grey, very sparsely irrorated with darker grey; costal edge usually narrowly ochreous; first line usually indicated by a median and a subdorsal fuscous dot, sometimes obsolete; a fuscous, median, subcostal, discal dot; postmedian represented by a series of fuscous dots from four-fifths costa to two-thirds dorsum, at first outwardly curved, then sinuate, rarely a connected line, in ♀ sometimes nearly obsolete, very rarely with a trace of ferruginous coloration; a faint subterminal series of dots sometimes developed in ♂, rarely larger and distinct, sometimes obsolete, usually obsolete in ♀; an interrupted blackish terminal line or series of dots; cilia pale grey. Hindwings with termen rounded; as forewings, but without basal line; discal dot present; subterminal dots rarely developed.

Differs from *T. intextata* in the more uniform grey coloration, usually ochreous-edged costa, differently formed postmedian line, which is rounded, not angled, beneath costa, and the much simpler postmedian markings, together with absence of any line in cilia.

Queensland: Caloundra, Brisbane, Stradbroke Island, Southport, Coolangatta, Toowoomba, Stanthorpe. New South Wales: Sydney, Jervis Bay, Katoomba, Mt. Wilson, Mittagong. Victoria: Melbourne, Beaconsfield, Gembrook, Castlemaine. Tasmania: Deloraine, Hobart.

22. TAXEOTIS INTERMIXTARIA.

Panagra intermixtaria Wlk., *Cat. Brit. Mus.*, xxiii, 1000.—*Panagra promelanaria* Wlk., *ibid.*, xxvi, 1666.—*Taxeotis intermixtaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1149.

♂. 26-32 mm. ♀. 25-26 mm. Head ochreous-grey-whitish; face dark fuscous. Palpi in ♂ 2½, in ♀ 3; dark fuscous, beneath white except at apex, sharply defined. Antennae pale grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen pale grey. Legs grey. Forewings triangular, costa slightly and evenly arched, apex moderately pointed, not acute, termen moderately rounded, slightly oblique; 12 anastomosing at a point with areole (3 ♂, 2 ♀), or connected with areole by a cross-bar (5 ♂, 2 ♀); pale grey very sparsely irrorated with fuscous scales, rather more so in ♀; a fuscous dot above dorsum at one-third, another in disc at one-fourth, and sometimes another on costa at one-third, representing first line; a small, median, subcostal, fuscous, discal dot; a fuscous dot on costa at three-fourths, giving rise to a slightly sinuate line of similar dots to dorsum at two-thirds, but sometimes disconnected from it; subterminal line of dots usually absent, but sometimes partly developed; a terminal series of blackish dots; cilia grey-whitish with a darker median line. Hindwings with termen rounded; as forewings, but without first line; postmedian line rounded, faintly marked or obsolete.

I have not seen many of this species, but sufficient to show that the absence of a subterminal line is not invariable. The markings stand out very distinctly on a pale grey background, and it is a neater species than *T. anthracopa*, from which it may be distinguished by the longer palpi as well as absence of ochreous edge on costa.

New South Wales: Bathurst. Victoria: Melbourne, Beaconsfield, Gisborne.

23. Taxeotis subvelaria.

Panagra subvelaria Wlk., *Cat. Brit. Mus.*, xxiii, 1000.—*Panagra reserata* Wlk., *ibid.*, 1010.—*Taxeotis isophanes* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1150.—*Taxeotis subvelaria* Prout, *Gen. Insect.*, Oenochrom., Pl. i, f. 11.

♂. 28-33 mm. ♀. 26-30 mm. Head grey; face blackish. Palpi 2 to 2¼; blackish, sharply white towards base beneath. Antennae pale grey; in ♂ shortly laminate and moderately ciliated. Thorax and abdomen grey. Legs fuscous; posterior pair whitish or grey irrorated with fuscous. Forewings triangular, costa gently and evenly arched in both sexes, apex pointed, not acute, termen gently rounded, scarcely oblique; 12 anastomosing at a point with areole (6 ♂, 4 ♀) or connected by a cross-bar (24 ♂, 18 ♀); grey with a few scattered dark fuscous scales; first line nearly straight from one-third costa to one-third dorsum, usually reduced to 3 or 4 fuscous dots, occasionally obsolete in ♀; a fuscous, median, subcostal, discal dot; postmedian line from four-fifths costa to two-thirds dorsum, sinuate, consisting of a series of fuscous dots, sometimes partly connected, occasionally these dots are very slightly ferruginous posteriorly; a subterminal line of dots variably developed, occasionally obsolete; a terminal series of blackish dots; cilia grey. Hindwings with termen rounded; pale grey; usually a faint fuscous transverse line or series of dots beyond middle, only slightly rounded; terminal dots often minute; cilia grey.

A good distinguishing mark of this species is the absence of the discal dot of the hindwings, which is, however, present on the underside. Very rarely is it faintly indicated on the upper surface. The palpi are longer than in *T. anthracopa*, and the costa of forewings is not ochreous tinged.

Queensland: Stanthorpe. New South Wales: Glen Innes, Armidale, Murrurundi, Sydney, Katoomba, Moruya, Cooma, Adaminaby, Broken Hill. Victoria: Melbourne, Beaconsfield, Gisborne, Castlemaine, Dunkeld. Tasmania: Launceston, Hobart. South Australia: Mt. Lofty.

24. Taxeotis ochrosticta, n. sp.

ὠχροστικτος, pale spotted.

♂. 26-28 mm. ♀. 26-28 mm. Head grey; face blackish. Palpi 1½; blackish with a sharply defined white basal area. Antennae grey, in ♂ shortly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey, posterior pair whitish, with slight fuscous irroration. Forewings triangular, costa straight, slightly arched near base and apex, apex pointed but not acute, termen gently rounded, slightly oblique; 12 anastomosing at a point with areole (2 ♂, 1 ♀, left forewing only), or connected by a cross-bar (4 ♂, 2 ♀), or free (the same ♀ right forewing); grey giving rise to a slightly sinuate line of similar dots to dorsum at two-thirds, but sometimes disconnected from it; subterminal line of dots usually absent, but sometimes partly developed; a terminal series of blackish dots; cilia grey-whitish with a darker median line. Hindwings with termen rounded; as forewings, but without first line; postmedian line rounded, faintly marked or obsolete.

I have not seen many of this species, but sufficient to show that the absence of a subterminal line is not invariable. The markings stand out very distinctly on a pale grey background, and it is a neater species than *T. anthracopa*, from which it may be distinguished by the longer palpi as well as absence of ochreous edge on costa.

New South Wales: Bathurst. Victoria: Melbourne, Beaconsfield, Gisborne.

23. TAXEOTIS SUBVELARIA.

Panagra subvelaria Wlk., *Cat. Brit. Mus.*, xxiii, 1000.—*Panagra reserata* Wlk., *ibid.*, 1010.—*Taxeotis isophanes* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1150.—*Taxeotis subvelaria* Prout, *Gen. Insect.*, Oenochrom., Pl. i, f. 11.

♂. 28-33 mm. ♀. 26-30 mm. Head grey; face blackish. Palpi 2 to 2¼; blackish, sharply white towards base beneath. Antennae pale grey; in ♂ shortly laminate and moderately ciliated. Thorax and abdomen grey. Legs fuscous; posterior pair whitish or grey irrorated with fuscous. Forewings triangular, costa gently and evenly arched in both sexes, apex pointed, not acute, termen gently rounded, scarcely oblique; 12 anastomosing at a point with areole (6 ♂, 4 ♀) or connected by a cross-bar (24 ♂, 18 ♀); grey with a few scattered dark fuscous scales; first line nearly straight from one-third costa to one-third dorsum, usually reduced to 3 or 4 fuscous dots, occasionally obsolete in ♀; a fuscous, median, subcostal, discal dot; postmedian line from four-fifths costa to two-thirds dorsum, sinuate, consisting of a series of fuscous dots, sometimes partly connected, occasionally these dots are very slightly ferruginous posteriorly; a subterminal line of dots variably developed, occasionally obsolete; a terminal series of blackish dots; cilia grey. Hindwings with termen rounded; pale grey; usually a faint fuscous transverse line or series of dots beyond middle, only slightly rounded; terminal dots often minute; cilia grey.

A good distinguishing mark of this species is the absence of the discal dot of the hindwings, which is, however, present on the underside. Very rarely is it faintly indicated on the upper surface. The palpi are longer than in *T. anthracopa*, and the costa of forewings is not ochreous tinged.

Queensland: Stanthorpe. New South Wales: Glen Innes, Armidale, Murrurundi, Sydney, Katoomba, Moruya, Cooma, Adaminaby, Broken Hill. Victoria: Melbourne, Beaconsfield, Gisborne, Castlemaine, Dunkeld. Tasmania: Launceston, Hobart. South Australia: Mt. Lofty.

24. TAXEOTIS OCHROSTICTA, n. sp.

ὠχροστικτος, pale spotted.

♂. 26-28 mm. ♀. 26-28 mm. Head grey; face blackish. Palpi 1½; blackish with a sharply defined white basal area. Antennae grey, in ♂ shortly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey, posterior pair whitish, with slight fuscous irroration. Forewings triangular, costa straight, slightly arched near base and apex, apex pointed but not acute, termen gently rounded, slightly oblique; 12 anastomosing at a point with areole (2 ♂, 1 ♀, left forewing only), or connected by a cross-bar (4 ♂, 2 ♀), or free (the same ♀ right forewing); grey with very slight fine, fuscous irroration, rather more in ♀; first line incomplete and twice dentate, represented by median and subdorsal dots, or absent; a median, subcostal, fuscous, discal dot; postmedian line represented by a line of ochreous-whitish dots parallel to termen; a terminal series of minute dark fuscous dots; cilia pale grey with more or less fine ochreous-whitish irroration. Hindwings with termen rounded; as forewings, but subterminal pale dots developed towards dorsum only.

Very distinct by the postmedian series of whitish-ochreous dots of forewing.

Queensland: Duaringa in September; nine specimens received from Mr. W. B. Barnard.

25. TAXEOTIS EGENATA.

Panagra egenata Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Taxeotis egenata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1148.

♂. 30-35 mm. ♀. 32-35 mm. Head grey; face blackish. Palpi 1½ to 1⅝; blackish with a whitish basal area sharply defined, but not clear white and containing some fuscous irroration. Antennae grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey with some fuscous irroration. Forewings triangular, costa straight, slightly arched towards apex, apex acute and slightly produced; termen very slightly sinuate; 12 anastomosing at a point with areole (2 ♂), or connected with it by a cross-bar (7 ♂, 5 ♀); grey with a few scattered dark fuscous scales; second line from one-fourth costa to one-fourth dorsum, nearly straight but rarely developed, sometimes represented by two or three fuscous dots, more often obsolete; a median, subcostal, fuscous discal dot, usually minute, rarely obsolete; postmedian from four-fifths costa to two-thirds dorsum, rather strongly rounded beneath costa, but not angled, thence straight or slightly sinuate; fuscous and distinct, or reduced to a series of fuscous dots, rarely obsolete, immediately followed by a whitish-ochreous or ferruginous line, which may be edged posteriorly with fuscous, so that postmedian line appears double; a subterminal series of fuscous dots variably developed, sometimes blackish with the two subdorsal dots enlarged; cilia grey, apices paler, sometimes with a distinct line of demarcation. Hindwings with termen rounded; as forewings, but without basal line and similarly variable.

This is a winter species, not difficult to recognize by the wing-shape and rather peculiar palpi; in the former it resembles *T. perlinearia*.

North Queensland: Stannary Hills near Herberton. Queensland: Rockhampton, Duaringa, Emerald in September, Peak Downs in July, Gayndah in July, Brisbane in July, August and September, Stradbroke Island, Toowoomba in July and August, Dalby.

26. TAXEOTIS PERLINEARIA.

Panagra perlinearia Wlk., *Cat. Brit. Mus.*, xxiii, 998.—*Panagra areniferata* Wlk., *ibid.*, 998.—*Panagra explicataria* Wlk., *ibid.*, 998.—*Taxeotis intextata* Meyr., PROC. LINN. SOC. N.S.W., 1890, 1147 (*nec* Guenée).—*Nearcha didymochroa* Low., *Trans. Roy. Soc. S. Aust.*, 1894, 80.—*Taxeotis collineata* Warr., *Novit. Zool.*, 1899, 13.—? *Taxeotis semifusca* Warr., *ibid.*, 324.

♂. 30-36 mm. ♀. 30-36 mm. Head grey; face ferruginous-fuscous. Palpi in ♂ 1½, in ♀ 1½ to 1⅝; ferruginous-fuscous, rather paler than face, toward base whitish, but basal area not clear white nor sharply defined. Antennae whitish-grey; in ♂ laminate and moderately ciliated. Thorax grey, sometimes brownish, with a few blackish scales. Abdomen grey with a few blackish scales. Legs with very slight fine, fuscous irroration, rather more in ♀; first line incomplete and twice dentate, represented by median and subdorsal dots, or absent; a median, subcostal, fuscous, discal dot; postmedian line represented by a line of ochreous-whitish dots parallel to termen; a terminal series of minute dark fuscous dots; cilia pale grey with more or less fine ochreous-whitish irroration. Hindwings with termen rounded; as forewings, but subterminal pale dots developed towards dorsum only.

Very distinct by the postmedian series of whitish-ochreous dots of forewing.

Queensland: Duaringa in September; nine specimens received from Mr. W. B. Barnard.

25. Taxeotis egenata.

Panagra egenata Wlk., *Cat. Brit. Mus.*, xxiii, 997.—*Taxeotis egenata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1148.

♂. 30-35 mm. ♀. 32-35 mm. Head grey; face blackish. Palpi 1½ to 1⅝; blackish with a whitish basal area sharply defined, but not clear white and containing some fuscous irroration. Antennae grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey with some fuscous irroration. Forewings triangular, costa straight, slightly arched towards apex, apex acute and slightly produced; termen very slightly sinuate; 12 anastomosing at a point with areole (2 ♂), or connected with it by a cross-bar (7 ♂, 5 ♀); grey with a few scattered dark fuscous scales; second line from one-fourth costa to one-fourth dorsum, nearly straight but rarely developed, sometimes represented by two or three fuscous dots, more often obsolete; a median, subcostal, fuscous discal dot, usually minute, rarely obsolete; postmedian from four-fifths costa to two-thirds dorsum, rather strongly rounded beneath costa, but not angled, thence straight or slightly sinuate; fuscous and distinct, or reduced to a series of fuscous dots, rarely obsolete, immediately followed by a whitish-ochreous or ferruginous line, which may be edged posteriorly with fuscous, so that postmedian line appears double; a subterminal series of fuscous dots variably developed, sometimes blackish with the two subdorsal dots enlarged; cilia grey, apices paler, sometimes with a distinct line of demarcation. Hindwings with termen rounded; as forewings, but without basal line and similarly variable.

This is a winter species, not difficult to recognize by the wing-shape and rather peculiar palpi; in the former it resembles *T. perlinearia.*

North Queensland: Stannary Hills near Herberton. Queensland: Rockhampton, Duaringa, Emerald in September, Peak Downs in July, Gayndah in July, Brisbane in July, August and September, Stradbroke Island, Toowoomba in July and August, Dalby.

26. Taxeotis perlinearia.

Panagra perlinearia Wlk., *Cat. Brit. Mus.*, xxiii, 998.—*Panagra areniferata* Wlk., *ibid.*, 998.—*Panagra explicataria* Wlk., *ibid.*, 998.—*Taxeotis intextata* Meyr., Proc. Linn. Soc. N.S.W., 1890, 1147 (*nec* Guenée).—*Nearcha didymochroa* Low., *Trans. Roy. Soc. S. Aust.*, 1894, 80.—*Taxeotis collineata* Warr., *Novit. Zool.*, 1899, 13.—? *Taxeotis semifusca* Warr., *ibid.*, 324.

♂. 30-36 mm. ♀. 30-36 mm. Head grey; face ferruginous-fuscous. Palpi in ♂ 1½, in ♀ 1½ to 1⅝; ferruginous-fuscous, rather paler than face, toward base whitish, but basal area not clear white nor sharply defined. Antennae whitish-grey; in ♂ laminate and moderately ciliated. Thorax grey, sometimes brownish, with a few blackish scales. Abdomen grey with a few blackish scales. Legs grey, posterior pair whitish, all with more or less dark fuscous irroration. Forewings triangular, costa very slightly arched or nearly straight, apex acute, often very slightly produced, more so in ♀, termen very slightly rounded, moderately oblique; 12 anastomosing at a point with areole (4 ♂, 3 ♀), or connected with areole by a short cross-bar (19 ♂, 14 ♀), or free (2 ♀); pale grey or whitish-grey with a very variable amount of fuscous irroration; in ♀ darker and more brownish-tinged; costal edge before middle usually narrowly ochreous; first line from three-fourths costa to three-fourths dorsum, usually represented by three fuscous or ferruginous-fuscous dots, sometimes obsolete, sometimes a more or less distinct suffused line, rarely clearly defined with three short projections outwards, beneath costa, in middle, and above dorsum; a median fuscous discal dot towards costa; postmedian line from three-fourths costa, curved outwards, then acutely angled inwards and sinuate to three-fourths dorsum, but often incomplete or obsolete towards costa so that the acute angle is not developed, beneath angle usually ferruginous, often with dark fuscous dots, it is also often double beneath angle; a subterminal series of fuscous dots succeeds the postmedian line very closely, often conspicuous, sometimes minute and partly obsolete; a terminal series of blackish dots; cilia grey, bases often irrorated with dark fuscous. Hindwings with termen gently rounded; as forewings, but without first line; postmedian line similarly variably developed.

Though very variable this species may be easily recognized by the short ferruginous-fuscous palpi, with whitish ill-defined basal area together with the rather long and narrow forewings with acute slightly produced apices. Corroborative points are the ochreous costal edge of forewings, and the ferruginous, peculiarly angled postmedian lines, but these are not constant. All forms of the species are taken together. The type is an example of one of the less common forms in which the lines are very sharply and completely developed.

North Queensland: Charters Towers (Warren). Queensland: Duaringa, Nambour, Brisbane, Stradbroke Island, Mt. Tambourine, Toowoomba, Stanthorpe. New South Wales: Sydney, Jervis Bay. Victoria: Melbourne, Beaconsfield, Leongatha, Moe, Gisborne. South Australia: Mt. Lofty.

27. TAXEOTIS ACROTHECTA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 223.

♂. 23-27 mm. ♀. 26 mm. Head whitish-grey; face dark ferruginous-fuscous. Palpi 1¼; dark ferruginous-fuscous. Antennae grey-whitish; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen whitish-grey. Legs grey; posterior pair whitish. Forewings triangular, costa straight, slightly arched towards base and apex, apex acute, slightly produced, termen sinuate, oblique; 12 anastomosing with areole (3 ♂), or connected with it by a bar (1 ♂, 1 ♀); grey-whitish, brownish-tinged in ♀, with sparse fuscous irroration; first line in ♀ straight from one-fourth dorsum nearly to one-fourth costa, in ♂ represented by subdorsal and median fuscous dots; a median, subcostal, fuscous, discal dot; postmedian from four-fifths costa, obtusely angled beneath costa, but often disconnected above angle, thence sinuate to three-fourths dorsum, in ♂ reduced to a series of fuscous dots, in ♀ entire, followed by a pale ferruginous line; a subterminal line of fuscous dots, usually mostly obsolete, closely follows; a terminal series of dark fuscous dots, cilia grey-whitish. Hindwings with termen rounded; as forewings, but without first line; postmedian line evenly curved.

grey, posterior pair whitish, all with more or less dark fuscous irroration. Forewings triangular, costa very slightly arched or nearly straight, apex acute, often very slightly produced, more so in ♀, termen very slightly rounded, moderately oblique; 12 anastomosing at a point with areole (4 ♂, 3 ♀), or connected with areole by a short cross-bar (19 ♂, 14 ♀), or free (2 ♀); pale grey or whitish-grey with a very variable amount of fuscous irroration; in ♀ darker and more brownish-tinged; costal edge before middle usually narrowly ochreous; first line from three-fourths costa to three-fourths dorsum, usually represented by three fuscous or ferruginous-fuscous dots, sometimes obsolete, sometimes a more or less distinct suffused line, rarely clearly defined with three short projections outwards, beneath costa, in middle, and above dorsum; a median fuscous discal dot towards costa; postmedian line from three-fourths costa, curved outwards, then acutely angled inwards and sinuate to three-fourths dorsum, but often incomplete or obsolete towards costa so that the acute angle is not developed, beneath angle usually ferruginous, often with dark fuscous dots, it is also often double beneath angle; a subterminal series of fuscous dots succeeds the postmedian line very closely, often conspicuous, sometimes minute and partly obsolete; a terminal series of blackish dots; cilia grey, bases often irrorated with dark fuscous. Hindwings with termen gently rounded; as forewings, but without first line; postmedian line similarly variably developed.

Though very variable this species may be easily recognized by the short ferruginous-fuscous palpi, with whitish ill-defined basal area together with the rather long and narrow forewings with acute slightly produced apices. Corroborative points are the ochreous costal edge of forewings, and the ferruginous, peculiarly angled postmedian lines, but these are not constant. All forms of the species are taken together. The type is an example of one of the less common forms in which the lines are very sharply and completely developed.

North Queensland: Charters Towers (Warren). Queensland: Duaringa, Nambour, Brisbane, Stradbroke Island, Mt. Tambourine, Toowoomba, Stanthorpe. New South Wales: Sydney, Jervis Bay. Victoria: Melbourne, Beaconsfield, Leongatha, Moe, Gisborne. South Australia: Mt. Lofty.

27. TAXEOTIS ACROTHECTA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 223.

♂. 23-27 mm. ♀. 26 mm. Head whitish-grey; face dark ferruginous-fuscous. Palpi 1¼; dark ferruginous-fuscous. Antennae grey-whitish; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen whitish-grey. Legs grey; posterior pair whitish. Forewings triangular, costa straight, slightly arched towards base and apex, apex acute, slightly produced, termen sinuate, oblique; 12 anastomosing with areole (3 ♂), or connected with it by a bar (1 ♂, 1 ♀); grey-whitish, brownish-tinged in ♀, with sparse fuscous irroration; first line in ♀ straight from one-fourth dorsum nearly to one-fourth costa, in ♂ represented by subdorsal and median fuscous dots; a median, subcostal, fuscous, discal dot; postmedian from four-fifths costa, obtusely angled beneath costa, but often disconnected above angle, thence sinuate to three-fourths dorsum, in ♂ reduced to a series of fuscous dots, in ♀ entire, followed by a pale ferruginous line; a subterminal line of fuscous dots, usually mostly obsolete, closely follows; a terminal series of dark fuscous dots, cilia grey-whitish. Hindwings with termen rounded; as forewings, but without first line; postmedian line evenly curved.

Distinguished by the wholly dark palpi together with the rather narrow forewings with acutely produced apices, and from *T. oraula* by the absence of fuscous costal spots.

North Queensland: Townsville, Magnetic Island; in August and September.

28. TAXEOTIS ORAULA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1143.—*Taxeotis adelpha* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 224.

♂. 20-28 mm. ♀. 24-28 mm. Head grey-whitish; face blackish. Palpi in ♂ 1½, in ♀ 2; blackish. Antennae grey, towards base grey-whitish; in ♂ slightly laminate; very shortly ciliated. Thorax and abdomen pale grey with slight fuscous irroration. Legs grey, posterior pair whitish, with more or less fuscous irroration. Forewings triangular, costa nearly straight, slightly arched near base and apex, less so in ♀, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, moderately oblique; 12 anastomosing at a point with areole (3 ♂, in one instance on one side only), or free but usually closely approximated (14 ♂, 4 ♀); pale grey with more or less fuscous irroration; first line straight, from one-third costa to one-third dorsum, represented by a fuscous costal spot and fuscous median and subdorsal dots rarely connected, in ♀ sometimes obsolete; a median, subcostal, fuscous, discal dot; postmedian line arising from a second fuscous costal spot at two-thirds, angled acutely inwards beneath costa, but upper limb of angle rarely developed, thence rather strongly bisinuate to two-thirds dorsum, ferruginous, interrupted in ♂ by fuscous or blackish dots, followed by a pale line, which is usually edged posteriorly by fuscous, so that postmedian line appears double; a subterminal series of fuscous dots, pale edged posteriorly, variably developed, sometimes well marked, sometimes obsolete; a terminal series of blackish dots; cilia grey, bases mixed with fuscous, which sometimes forms an indistinct line. Hindwings with termen rounded; as forewings, but without first line; second line usually developed only towards dorsum.

Very similar to *T. intextata*, but much smaller and the palpi wholly blackish; the costal spots are usually well developed.

New South Wales: Barrington Tops (4,000-5,000 feet), Katoomba (3,500 feet), Mt. Kosciusko (5,000-6,000 feet). Victoria: Gisborne. Tasmania: Russell Falls, Beaconsfield, Cradle Mt. (2,000-3,000 feet), Burnie, Zeehan, Strahan.

29. TAXEOTIS GONIOGRAMMA.

Meyr., *Trans. Ent. Soc. Lond.*, 1897, 376.

♂. 28 mm. Head grey; face blackish. Palpi 1½; blackish. Antennae pale grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey; posterior pair grey-whitish. Forewings triangular, costa very slightly arched, apex acute, termen slightly sinuate, slightly oblique; 12 connected by a bar with areole (1 ♂); grey rather densely irrorated with fuscous, less so towards costa and termen; first line obsolete; a median, subcostal, fuscous, discal dot slightly indicated; postmedian line from three-fourths costa to two-thirds dorsum, pale suffusedly edged with fuscous on both sides, forming a right angle beneath costa; a subterminal series of blackish dots slightly developed; a slender oblique fuscous streak from beneath apex; an interrupted blackish terminal line; cilia grey-whitish with a few fuscous points. Hindwings with termen rounded; as forewings, but paler; discal dot obsolete; postmedian line median, nearly straight, pale, edged on both sides with fuscous.

Distinguished by the wholly dark palpi together with the rather narrow forewings with acutely produced apices, and from *T. oraula* by the absence of fuscous costal spots.

North Queensland: Townsville, Magnetic Island; in August and September.

28. TAXEOTIS ORAULA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1143.—*Taxeotis adelpha* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 224.

♂. 20-28 mm. ♀. 24-28 mm. Head grey-whitish; face blackish. Palpi in ♂ 1½, in ♀ 2; blackish. Antennae grey, towards base grey-whitish; in ♂ slightly laminate; very shortly ciliated. Thorax and abdomen pale grey with slight fuscous irroration. Legs grey, posterior pair whitish, with more or less fuscous irroration. Forewings triangular, costa nearly straight, slightly arched near base and apex, less so in ♀, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, moderately oblique; 12 anastomosing at a point with areole (3 ♂, in one instance on one side only), or free but usually closely approximated (14 ♂, 4 ♀); pale grey with more or less fuscous irroration; first line straight, from one-third costa to one-third dorsum, represented by a fuscous costal spot and fuscous median and subdorsal dots rarely connected, in ♀ sometimes obsolete; a median, subcostal, fuscous, discal dot; postmedian line arising from a second fuscous costal spot at two-thirds, angled acutely inwards beneath costa, but upper limb of angle rarely developed, thence rather strongly bisinuate to two-thirds dorsum, ferruginous, interrupted in ♂ by fuscous or blackish dots, followed by a pale line, which is usually edged posteriorly by fuscous, so that postmedian line appears double; a subterminal series of fuscous dots, pale edged posteriorly, variably developed, sometimes well marked, sometimes obsolete; a terminal series of blackish dots; cilia grey, bases mixed with fuscous, which sometimes forms an indistinct line. Hindwings with termen rounded; as forewings, but without first line; second line usually developed only towards dorsum.

Very similar to *T. intextata*, but much smaller and the palpi wholly blackish; the costal spots are usually well developed.

New South Wales: Barrington Tops (4,000-5,000 feet), Katoomba (3,500 feet), Mt. Kosciusko (5,000-6,000 feet). Victoria: Gisborne. Tasmania: Russell Falls, Beaconsfield, Cradle Mt. (2,000-3,000 feet), Burnie, Zeehan, Strahan.

29. TAXEOTIS GONIOGRAMMA.

Meyr., *Trans. Ent. Soc. Lond.*, 1897, 376.

♂. 28 mm. Head grey; face blackish. Palpi 1½; blackish. Antennae pale grey; in ♂ slightly laminate, shortly ciliated. Thorax and abdomen grey. Legs grey; posterior pair grey-whitish. Forewings triangular, costa very slightly arched, apex acute, termen slightly sinuate, slightly oblique; 12 connected by a bar with areole (1 ♂); grey rather densely irrorated with fuscous, less so towards costa and termen; first line obsolete; a median, subcostal, fuscous, discal dot slightly indicated; postmedian line from three-fourths costa to two-thirds dorsum, pale suffusedly edged with fuscous on both sides, forming a right angle beneath costa; a subterminal series of blackish dots slightly developed; a slender oblique fuscous streak from beneath apex; an interrupted blackish terminal line; cilia grey-whitish with a few fuscous points. Hindwings with termen rounded; as forewings, but paler; discal dot obsolete; postmedian line median, nearly straight, pale, edged on both sides with fuscous.

Queensland: Toowoomba in May; one specimen received from Mr. W. B. Barnard. I have little doubt, allowing for variation, that this is conspecific with Meyrick's type from Duaringa.

30. TAXEOTIS HOLOSCIA.

Low., *Trans. Roy. Soc. S. Aust.*, 1903, 186.

♂. 26-31 mm. ♀. 24-31 mm. Head grey; face blackish. Palpi 1½; wholly blackish. Antennae grey, bases paler and sometimes annulated with fuscous; in ♂ laminate and shortly ciliated. Thorax and abdomen grey. Legs fuscous; posterior pair grey. Forewings triangular, costa slightly and evenly arched, apex rather acutely pointed, termen slightly rounded, slightly oblique; 12 anastomosing with areole at a point (3 ♂), or connected with it by a cross-bar (7 ♂, 7 ♀); rather dark grey with a few scattered fuscous scales; first line nearly straight, from one-fourth costa to one-third dorsum, usually reduced to subdorsal and median fuscous dots; a median, subcostal, blackish, discal dot; postmedian line from three-fourths costa gently curved outwards, then slightly sinuate to two-thirds dorsum, usually reduced to a series of fuscous dots, occasionally ferruginous, occasionally edged posteriorly by ochreous-whitish; subterminal line obsolete or very faintly indicated; a terminal series of blackish dots, sometimes minute; cilia grey, apices paler. Hindwings with termen rounded; as forewings, but without first line; discal dot distinct or obsolete; postmedian line evenly curved, sometimes scarcely developed or only towards dorsum.

Very similar to *T. anthracopa* and *T. subvelaria*, but immediately distinguished by the wholly blackish palpi.

Queensland: Brisbane, Stradbroke Island, Toowoomba; seventeen specimens, all taken in September or early in October.

31. TAXEOTIS XANTHOGRAMMA.

Low., *Trans. Roy. Soc. S. Aust.*, 1903, 186.

♂. 25-32 mm. ♀. 22-26 mm. Head whitish-grey; face blackish. Palpi 2 to 2½; blackish. Antennae grey; in ♂ dentate, ciliations 1. Thorax pale grey. abdomen grey. Legs fuscous; posterior pair grey. Forewings triangular, in ♂ broad, costa moderately and evenly arched, apex round-pointed in ♂, pointed but not acute in ♀, termen rounded, slightly oblique; 12 connected by a bar with areole (6 ♂, 1 ♀); pale grey, sparsely irrorated with fuscous; first line from one-third costa to one-third dorsum, nearly straight, consisting of costal, median, and dorsal fuscous spots, each edged anteriorly more or less with ferruginous; a median, subcostal, fuscous, discal dot; postmedian line from two-thirds costa, broadly outwardly curved, and then sinuate to two-thirds dorsum, composed of fuscous dots edged posteriorly more or less with ferruginous; a sinuate subterminal series of fuscous dots more or less developed; a terminal series of blackish dots; cilia grey more or less mixed with grey-whitish. Hindwings with termen rounded; grey, darker than forewings; without markings, except for some fuscous strigulae on dorsum; terminal dots present or absent; cilia grey.

Easily recognized by the conspicuous lines of ferruginous-edged dots, and the broad forewings with rounded apices of the ♂.

New South Wales: Broken Hill. Victoria: Birchip, Sea Lake. South Australia: Pinnaroo.

Queensland: Toowoomba in May; one specimen received from Mr. W. B. Barnard. I have little doubt, allowing for variation, that this is conspecific with Meyrick's type from Duaringa.

30. TAXEOTIS HOLOSCIA.

Low., *Trans. Roy. Soc. S. Aust.*, 1903, 186.

♂. 26-31 mm. ♀. 24-31 mm. Head grey; face blackish. Palpi 1½; wholly blackish. Antennae grey, bases paler and sometimes annulated with fuscous; in ♂ laminate and shortly ciliated. Thorax and abdomen grey. Legs fuscous; posterior pair grey. Forewings triangular, costa slightly and evenly arched, apex rather acutely pointed, termen slightly rounded, slightly oblique; 12 anastomosing with areole at a point (3 ♂), or connected with it by a cross-bar (7 ♂, 7 ♀); rather dark grey with a few scattered fuscous scales; first line nearly straight, from one-fourth costa to one-third dorsum, usually reduced to subdorsal and median fuscous dots; a median, subcostal, blackish, discal dot; postmedian line from three-fourths costa gently curved outwards, then slightly sinuate to two-thirds dorsum, usually reduced to a series of fuscous dots, occasionally ferruginous, occasionally edged posteriorly by ochreous-whitish; subterminal line obsolete or very faintly indicated; a terminal series of blackish dots, sometimes minute; cilia grey, apices paler. Hindwings with termen rounded; as forewings, but without first line; discal dot distinct or obsolete; postmedian line evenly curved, sometimes scarcely developed or only towards dorsum.

Very similar to *T. anthracopa* and *T. subvelaria*, but immediately distinguished by the wholly blackish palpi.

Queensland: Brisbane, Stradbroke Island, Toowoomba; seventeen specimens, all taken in September or early in October.

31. TAXEOTIS XANTHOGRAMMA.

Low., *Trans. Roy. Soc. S. Aust.*, 1903, 186.

♂. 25-32 mm. ♀. 22-26 mm. Head whitish-grey; face blackish. Palpi 2 to 2½; blackish. Antennae grey; in ♂ dentate, ciliations 1. Thorax pale grey. abdomen grey. Legs fuscous; posterior pair grey. Forewings triangular, in ♂ broad, costa moderately and evenly arched, apex round-pointed in ♂, pointed but not acute in ♀, termen rounded, slightly oblique; 12 connected by a bar with areole (6 ♂, 1 ♀); pale grey, sparsely irrorated with fuscous; first line from one-third costa to one-third dorsum, nearly straight, consisting of costal, median, and dorsal fuscous spots, each edged anteriorly more or less with ferruginous; a median, subcostal, fuscous, discal dot; postmedian line from two-thirds costa, broadly outwardly curved, and then sinuate to two-thirds dorsum, composed of fuscous dots edged posteriorly more or less with ferruginous; a sinuate subterminal series of fuscous dots more or less developed; a terminal series of blackish dots; cilia grey more or less mixed with grey-whitish. Hindwings with termen rounded; grey, darker than forewings; without markings, except for some fuscous strigulae on dorsum; terminal dots present or absent; cilia grey.

Easily recognized by the conspicuous lines of ferruginous-edged dots, and the broad forewings with rounded apices of the ♂.

New South Wales: Broken Hill. Victoria: Birchip, Sea Lake. South Australia: Pinnaroo.

32. Taxeotis bigeminata.

Prout, *Gen. Insect.*, Oenochrominae, p. 35.

♂. 19 mm. Head brown-whitish; face dark fuscous. Palpi 2; dark fuscous, lower surface towards base brown-whitish. Antennae brownish; ciliations in ♂ ⅔. Thorax brownish. Abdomen brown-whitish. Legs fuscous-brown; posterior pair brown-whitish. Forewings triangular, costa gently arched, apex round-pointed, termen bowed, oblique; 11 connected with 12; brown-whitish; markings dark fuscous; a double oblique line from one-third costa to one-fourth dorsum, the posterior line obsolete towards costa; a median subcostal discal dot; a second double line from two-thirds costa, bent outwards beneath costa, then sharply angled parallel to termen and doubly toothed, upper tooth tolerably acute, lower obtuse, then sinuate to three-fourths dorsum, the posterior line obsolete towards costa; a terminal series of dots; cilia concolorous. Hindwings with termen rounded; brown-whitish; a minute median fuscous dot; a short double transverse line from three-fourths dorsum; a terminal series of dots; cilia concolorous. Underside brown-whitish, slightly darker in forewings, with sparse fuscous irroration, and a median dot in hindwings.

N.W. Australia: Sherlock River; described from the type in the British Museum.

33. Taxeotis eremophila, n. sp.

ἐρημοφιλος, a desert lover.

♂. 26 mm. Head grey-whitish; face blackish. Palpi 1¾; blackish. Antennae grey-whitish; in ♂ slightly dentate, ciliations 1. Thorax and abdomen grey-whitish. Legs fuscous; posterior pair grey. Forewings triangular, costa nearly straight to near apex, apex round-pointed, termen gently rounded, slightly oblique; 12 connected by a bar with areole; grey-whitish irrorated with fuscous; markings fuscous; antemedian line represented by two or three dots; a median subcostal discal dot; postmedian line slender, from three-fourths costa slightly outwardly oblique to middle of disc, thence twice angled, thence concave to two-thirds termen; in a second example the whole of the median area between the lines is uniformly suffused with fuscous; a subterminal series of suffused dots; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen gently rounded; pale grey; a few subterminal fuscous dots towards dorsum; a terminal series of fuscous dots; cilia pale grey. Underside uniformly pale grey.

Nearest *T. xanthogramma*, which it resembles in shape of wing, but with the lines much less distinctly marked, without any ferruginous tinge, and the ground-colour much whiter.

South Australia: Ooldea (A. J. Nicholson) in August; two specimens in Coll. Goldfinch.

34. Taxeotis phaeopa.

Low., Proc. Linn. Soc. N.S.W., 1899, 84.

♂. 25-31 mm. ♀. 24 mm. Head grey-whitish; face pale ferruginous. Palpi in ♂ 2, in ♀ 2½; pale ferruginous. Antennae grey; in ♂ slightly laminate with moderate ciliations. Thorax grey-whitish. Abdomen pale grey. Legs grey; posterior pair whitish. Forewings triangular, costa arched at base, thence straight to near apex, apex pointed but not acute, termen slightly rounded, scarcely oblique; 12 connected by a bar with areole (5 ♂, 3 ♀); whitish sparsely irrorated with grey, and in ♀ with ferruginous; first line from a fuscous spot on one-third

32. TAXEOTIS BIGEMINATA.

Prout, *Gen. Insect.*, Oenochrominae, p. 35.

♂. 19 mm. Head brown-whitish; face dark fuscous. Palpi 2; dark fuscous, lower surface towards base brown-whitish. Antennae brownish; ciliations in ♂ ⅔. Thorax brownish. Abdomen brown-whitish. Legs fuscous-brown; posterior pair brown-whitish. Forewings triangular, costa gently arched, apex round-pointed, termen bowed, oblique; 11 connected with 12; brown-whitish; markings dark fuscous; a double oblique line from one-third costa to one-fourth dorsum, the posterior line obsolete towards costa; a median subcostal discal dot; a second double line from two-thirds costa, bent outwards beneath costa, then sharply angled parallel to termen and doubly toothed, upper tooth tolerably acute, lower obtuse, then sinuate to three-fourths dorsum, the posterior line obsolete towards costa; a terminal series of dots; cilia concolorous. Hindwings with termen rounded; brown-whitish; a minute median fuscous dot; a short double transverse line from three-fourths dorsum; a terminal series of dots; cilia concolorous. Underside brown-whitish, slightly darker in forewings, with sparse fuscous irroration, and a median dot in hindwings.

N.W. Australia: Sherlock River; described from the type in the British Museum.

33. TAXEOTIS EREMOPHILA, n. sp.

ἐρημοφιλος, a desert lover.

♂. 26 mm. Head grey-whitish; face blackish. Palpi 1¾; blackish. Antennae grey-whitish; in ♂ slightly dentate, ciliations 1. Thorax and abdomen grey-whitish. Legs fuscous; posterior pair grey. Forewings triangular, costa nearly straight to near apex, apex round-pointed, termen gently rounded, slightly oblique; 12 connected by a bar with areole; grey-whitish irrorated with fuscous; markings fuscous; antemedian line represented by two or three dots; a median subcostal discal dot; postmedian line slender, from three-fourths costa slightly outwardly oblique to middle of disc, thence twice angled, thence concave to two-thirds termen; in a second example the whole of the median area between the lines is uniformly suffused with fuscous; a subterminal series of suffused dots; a terminal series of blackish dots; cilia grey-whitish. Hindwings with termen gently rounded; pale grey; a few subterminal fuscous dots towards dorsum; a terminal series of fuscous dots; cilia pale grey. Underside uniformly pale grey.

Nearest *T. xanthogramma*, which it resembles in shape of wing, but with the lines much less distinctly marked, without any ferruginous tinge, and the ground-colour much whiter.

South Australia: Ooldea (A. J. Nicholson) in August; two specimens in Coll. Goldfinch.

34. TAXEOTIS PHAEOPA.

Low., PROC. LINN. SOC. N.S.W., 1899, 84.

♂. 25-31 mm. ♀. 24 mm. Head grey-whitish; face pale ferruginous. Palpi in ♂ 2, in ♀ 2½; pale ferruginous. Antennae grey; in ♂ slightly laminate with moderate ciliations. Thorax grey-whitish. Abdomen pale grey. Legs grey; posterior pair whitish. Forewings triangular, costa arched at base, thence straight to near apex, apex pointed but not acute, termen slightly rounded, scarcely oblique; 12 connected by a bar with areole (5 ♂, 3 ♀); whitish sparsely irrorated with grey, and in ♀ with ferruginous; first line from a fuscous spot on one-third costa, consisting of two ferruginous dots, median and subdorsal, sometimes partly connected and slightly outwardly dentate, in ♀ obsolete except costal spot; a median, subcostal, transversely elongate, fuscous, discal dot, sometimes minute in ♀; postmedian from a fuscous spot on two-thirds costa, thence extremely fine, crenulate, ferruginous, sometimes reduced to dots, obsolete in ♀, doubly sinuate to three-fourths dorsum; a subterminal series of fuscous dots more or less developed, sometimes obsolete; a terminal series of blackish dots; cilia whitish, bases sometimes ferruginous, sometimes slightly irrorated with grey. Hindwings with termen rounded; colour, terminal dots, and cilia as forewings; rarely with a median discal dot.

Among the species with pale ferruginous face and palpi this is distinguished by its whitish forewings, with lines very slender or obsolete, but with rather conspicuous costal spots.

New South Wales: Broken Hill.

35. TAXEOTIS EXSECTARIA.

Panagra exsectaria Wlk., *Cat. Brit. Mus.*, xxiii, 1011.—*Taxeotis exsectaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1144.—*Taxeotis calypsis* Prout, *Gen. Insect.*, Oenochrom., p. 35 (ab.).

♂. 18-26 mm. ♀. 18-22 mm. Head pale grey (rarely whitish), face ferruginous. Palpi in ♂ 2½, in ♀ 3; ferruginous with a white basal area. Antennae grey, towards base paler or whitish with some darker annulations; in ♂ slightly laminate, shortly ciliated (½). Thorax and abdomen grey. Legs fuscous with more or less whitish irroration. Forewings triangular, costa gently arched, apex rather acutely pointed, termen slightly sinuate, oblique; 12 anastomosing at a point with areole (1 ♂, 1 ♀), or connected with it by a bar (19 ♂, 10 ♀); pale grey; first line consisting of costal, median, subdorsal, and dorsal fuscous dots, often confluent toward dorsum, forming a short line; a median, subcostal, fuscous, discal dot; postmedian line consists of a fuscous dot on two-thirds costa, rarely connected with a bisinuate blackish or partly ferruginous line to two-thirds dorsum, sometimes reduced to a series of dots, this is followed by a pale line, sometimes followed by a fuscous suffusion so that postmedian line appears double; a subterminal series of fuscous dots, edged posteriorly with whitish, more or less developed; a terminal series of blackish dots; cilia pale grey. Hindwings with termen rounded; pale grey; discal dot obscure or absent; postmedian line slender, or developed towards dorsum only.

A variable species, always recognizable by its palpi. Western Australian specimens are rather larger, more uniformly grey, lines less intensely developed, etc., but the differences are not absolute and indicate only a local race (*eugenestera* Prout in Seitz's Macrolepidoptera).

I have examined the type of *T. calypsis*.

Queensland: Stradbroke Island, Coolangatta, Stanthorpe. New South Wales: Lismore, Sydney, Jervis Bay, Bathurst, Broken Hill. South Australia: Adelaide. Western Australia: Albany, Perth, Waroona, York, Collie.

36. TAXEOTIS MIMELA.

Prout, *Gen. Insect.*, Oenochrom., p. 36.

♂. 25-30 mm. ♀. 24-28 mm. Head ochreous-grey-whitish; face ferruginous or ferruginous-fuscous. Palpi in ♂ 1¼ to 2½, in ♀ 2½; ferruginous or ferruginous-costa, consisting of two ferruginous dots, median and subdorsal, sometimes partly connected and slightly outwardly dentate, in ♀ obsolete except costal spot; a median, subcostal, transversely elongate, fuscous, discal dot, sometimes minute in ♀; postmedian from a fuscous spot on two-thirds costa, thence extremely fine, crenulate, ferruginous, sometimes reduced to dots, obsolete in ♀, doubly sinuate to three-fourths dorsum; a subterminal series of fuscous dots more or less developed, sometimes obsolete; a terminal series of blackish dots; cilia whitish, bases sometimes ferruginous, sometimes slightly irrorated with grey. Hindwings with termen rounded; colour, terminal dots, and cilia as forewings; rarely with a median discal dot.

Among the species with pale ferruginous face and palpi this is distinguished by its whitish forewings, with lines very slender or obsolete, but with rather conspicuous costal spots.

New South Wales: Broken Hill.

35. TAXEOTIS EXSECTARIA.

Panagra exsectaria Wlk., *Cat. Brit. Mus.*, xxiii, 1011.—*Taxeotis exsectaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1144.—*Taxeotis calypsis* Prout, *Gen. Insect.*, Oenochrom., p. 35 (ab.).

♂. 18-26 mm. ♀. 18-22 mm. Head pale grey (rarely whitish), face ferruginous. Palpi in ♂ 2½, in ♀ 3; ferruginous with a white basal area. Antennae grey, towards base paler or whitish with some darker annulations; in ♂ slightly laminate, shortly ciliated (½). Thorax and abdomen grey. Legs fuscous with more or less whitish irroration. Forewings triangular, costa gently arched, apex rather acutely pointed, termen slightly sinuate, oblique; 12 anastomosing at a point with areole (1 ♂, 1 ♀), or connected with it by a bar (19 ♂, 10 ♀); pale grey; first line consisting of costal, median, subdorsal, and dorsal fuscous dots, often confluent toward dorsum, forming a short line; a median, subcostal, fuscous, discal dot; postmedian line consists of a fuscous dot on two-thirds costa, rarely connected with a bisinuate blackish or partly ferruginous line to two-thirds dorsum, sometimes reduced to a series of dots, this is followed by a pale line, sometimes followed by a fuscous suffusion so that postmedian line appears double; a subterminal series of fuscous dots, edged posteriorly with whitish, more or less developed; a terminal series of blackish dots; cilia pale grey. Hindwings with termen rounded; pale grey; discal dot obscure or absent; postmedian line slender, or developed towards dorsum only.

A variable species, always recognizable by its palpi. Western Australian specimens are rather larger, more uniformly grey, lines less intensely developed, etc., but the differences are not absolute and indicate only a local race (*eugenestera* Prout in Seitz's Macrolepidoptera).

I have examined the type of *T. calypsis*.

Queensland: Stradbroke Island, Coolangatta, Stanthorpe. New South Wales: Lismore, Sydney, Jervis Bay, Bathurst, Broken Hill. South Australia: Adelaide. Western Australia: Albany, Perth, Waroona, York, Collie.

36. TAXEOTIS MIMELA.

Prout, *Gen. Insect.*, Oenochrom., p. 36.

♂. 25-30 mm. ♀. 24-28 mm. Head ochreous-grey-whitish; face ferruginous or ferruginous-fuscous. Palpi in ♂ 1¼ to 2½, in ♀ 2½; ferruginous or ferruginous-fuscous, sometimes paler towards base. Antennae ochreous-grey-whitish; in ♂ slightly laminate, shortly ciliated. Thorax, abdomen, and legs ochreous-grey-whitish with some scattered grey or fuscous scales. Forewings triangular, costa gently and evenly arched, less so in ♀, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen in ♂ gently rounded, in ♀ slightly sinuate, scarcely oblique; 12 free (7 ♂, 6 ♀), but often closely approximated to areole; ochreous-grey-whitish, in ♀ brownish-tinged, sparsely irrorated with pale fuscous; first line straight, from one-third costa to one-third dorsum, in ♂ reduced to 3 or 4 fuscous dots, in ♀ obsolete; a median, subcostal, fuscous, discal dot, usually minute, sometimes obsolete in ♀, rarely enlarged (1 ♂); postmedian line from a fuscous spot on two-thirds costa, at first outwardly oblique and then angled inwards beneath costa, but upper limb of angle usually obsolete, thence bisinuate, rather strongly so in ♂, less strongly in ♀, ending on two-thirds dorsum, this is followed by a pale line, which may be edged posteriorly with fuscous, so that postmedian appears double; subterminal line of dots well marked in ♂, pale-edged posteriorly, that above dorsum enlarged, in ♀ feebly marked or obsolete; cilia ochreous-whitish, bases partly or wholly grey, dividing line sometimes distinct. Hindwings with termen rounded; as forewings, but without first line; sometimes a pale crenulate subterminal line, but subterminal fuscous dots indistinct.

Generally resembling *T. intextata*, but at once distinguished by the very different palpi which, however, vary both in length and colour more than is usual in the genus. The dot-like discal spot of forewing distinguishes it from *T. stereospila*.

Queensland: Toowoomba, in December. New South Wales: Jenolan, in February. Victoria: Melbourne, Lorne, Beaconsfield, Moe, Leongatha, Gisborne, Mt. St. Bernard; from November to March.

37. TAXEOTIS EXAERETA, n. sp.

ἐξαιρετος, picked out.

♂. 20-23 mm. Head whitish or pale grey; face pale ferruginous. Palpi 2¼; fuscous; upper surface whitish. Antennae pale grey becoming whitish towards base; in ♂ slightly laminate, shortly ciliated. Thorax grey. Abdomen grey-whitish. Legs grey; posterior pair whitish. Forewings rather narrowly triangular, costa slightly arched, apex rather acutely pointed, termen slightly rounded, oblique; 12 free (3 ♂); grey-whitish or pale grey; markings fuscous; first line nearly straight from one-third costa to one-third dorsum, sometimes partly or wholly obsolete; a roughly circular, pale-centred, median, subcostal, discal spot; postmedian line from beneath three-fourths costa to two-thirds dorsum, strongly bisinuate, linear or reduced to a series of dots; a parallel subterminal series of dots more or less developed; a terminal series of dots; cilia grey-whitish. Hindwings slightly rounded; grey-whitish; without discal dot; postmedian line indicated only towards dorsum.

Differs from all other species in the palpi being whitish above, dark beneath, a reversal of the usual coloration. This, with the pale ferruginous face, makes it easy of recognition. In the pale-centred discal spot of forewings it agrees with *T. stereospila*.

Western Australia: Busselton, in October; three specimens received from Mr. G. M. Goldfinch, who has the type.

fuscous, sometimes paler towards base. Antennae ochreous-grey-whitish; in ♂ slightly laminate, shortly ciliated. Thorax, abdomen, and legs ochreous-grey-whitish with some scattered grey or fuscous scales. Forewings triangular, costa gently and evenly arched, less so in ♀, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen in ♂ gently rounded, in ♀ slightly sinuate, scarcely oblique; 12 free (7 ♂, 6 ♀), but often closely approximated to areole; ochreous-grey-whitish, in ♀ brownish-tinged, sparsely irrorated with pale fuscous; first line straight, from one-third costa to one-third dorsum, in ♂ reduced to 3 or 4 fuscous dots, in ♀ obsolete; a median, subcostal, fuscous, discal dot, usually minute, sometimes obsolete in ♀, rarely enlarged (1 ♂); postmedian line from a fuscous spot on two-thirds costa, at first outwardly oblique and then angled inwards beneath costa, but upper limb of angle usually obsolete, thence bisinuate, rather strongly so in ♂, less strongly in ♀, ending on two-thirds dorsum, this is followed by a pale line, which may be edged posteriorly with fuscous, so that postmedian appears double; subterminal line of dots well marked in ♂, pale-edged posteriorly, that above dorsum enlarged, in ♀ feebly marked or obsolete; cilia ochreous-whitish, bases partly or wholly grey, dividing line sometimes distinct. Hindwings with termen rounded; as forewings, but without first line; sometimes a pale crenulate subterminal line, but subterminal fuscous dots indistinct.

Generally resembling *T. intextata*, but at once distinguished by the very different palpi which, however, vary both in length and colour more than is usual in the genus. The dot-like discal spot of forewing distinguishes it from *T. stereospila*.

Queensland: Toowoomba, in December. New South Wales: Jenolan, in February. Victoria: Melbourne, Lorne, Beaconsfield, Moe, Leongatha, Gisborne, Mt. St. Bernard; from November to March.

37. TAXEOTIS EXAERETA, n. sp.

ἐξαιρετος, picked out.

♂. 20-23 mm. Head whitish or pale grey; face pale ferruginous. Palpi 2¼; fuscous; upper surface whitish. Antennae pale grey becoming whitish towards base; in ♂ slightly laminate, shortly ciliated. Thorax grey. Abdomen grey-whitish. Legs grey; posterior pair whitish. Forewings rather narrowly triangular, costa slightly arched, apex rather acutely pointed, termen slightly rounded, oblique; 12 free (3 ♂); grey-whitish or pale grey; markings fuscous; first line nearly straight from one-third costa to one-third dorsum, sometimes partly or wholly obsolete; a roughly circular, pale-centred, median, subcostal, discal spot; postmedian line from beneath three-fourths costa to two-thirds dorsum, strongly bisinuate, linear or reduced to a series of dots; a parallel subterminal series of dots more or less developed; a terminal series of dots; cilia grey-whitish. Hindwings slightly rounded; grey-whitish; without discal dot; postmedian line indicated only towards dorsum.

Differs from all other species in the palpi being whitish above, dark beneath, a reversal of the usual coloration. This, with the pale ferruginous face, makes it easy of recognition. In the pale-centred discal spot of forewings it agrees with *T. stereospila*.

Western Australia: Busselton, in October; three specimens received from Mr. G. M. Goldfinch, who has the type.

38. TAXEOTIS STEREOSPILA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1142.

♂. 25-32 mm. ♀. 24-28 mm. Head ochreous-grey-whitish; face ferruginous. Palpi in ♂ 3 to 3½, in ♀ 3½ to 4; pale ferruginous. Antennae pale grey becoming ochreous-whitish towards base; in ♂ laminate, shortly ciliated. Thorax, abdomen and legs ochreous-grey-whitish, more or less irrorated with fuscous. Forewings triangular, costa gently and evenly arched, less so in ♀, apex acute, in ♀ slightly produced, termen slightly rounded, in ♀ slightly sinuate, slightly oblique; 12 free (19 ♂, 9 ♀), but sometimes rather closely approximated to areole; ochreous-grey-whitish, in ♀ often brownish, more or less irrorated with fuscous; costal edge ochreous, in ♂ often reddish-orange, towards base; first line nearly straight, from one-fourth costa to one-fourth dorsum, represented by three or four fuscous dots, that on costa often enlarged, rarely obsolete in ♂, more often in ♀; a small, median, subcostal, fuscous, discal spot with pale centre; postmedian line represented by a fuscous dot on three-fourths costa, not always present, and a disconnected line, sometimes connected by a fuscous streak with apex, from beneath costa near apex to two-thirds dorsum, sinuate, composed of fuscous or ferruginous dots sometimes connected, towards dorsum sometimes suffused or double, less often so in disc; a subterminal line of fuscous dots more or less developed closely follows; a terminal series of blackish dots; cilia ochreous-whitish, sometimes with basal fuscous irroration, which rarely in ♂, but often in ♀, is so dense as to form a distinct line. Hindwings with termen rounded; concolorous; discal dot usually obsolete, when present nearly always minute, never pale-centred; postmedian line usually developed only towards dorsum; terminal dots and cilia as forewings.

Differs from all except the preceding in the pale-centred discal spot of forewing. From *T. adelia*, to which it is allied, it differs also in the longer palpi and ochreous costa.

Queensland: National Park (2,500 feet), Toowoomba, Bunya Mt. (3,500 feet), Warwick, Killarney, Stanthorpe. New South Wales: Sydney, Mt. Wilson (3,500 feet), Bathurst. Victoria: Gisborne, Mansfield.

39. TAXEOTIS ENDELA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1142.—*Prototypa dryina* Turn., *ibid.*, 1916, 252.

♂. 27-32 mm. ♀. 24-32 mm. Head ochreous-whitish, face pale ferruginous. Palpi 2; pale ferruginous, sometimes suffusedly whitish at base. Antennae grey-whitish; in ♂ strongly laminate with rather long ciliations. Thorax, abdomen, and legs ochreous-whitish. Forewings triangular, costa nearly straight except near base and apex, apex pointed, in ♀ acute, termen slightly sinuate, slightly oblique; 12 free but closely approximated to 11 before it joins areole (4 ♂, 2 ♀), or anastomosing with 11 (3 ♂, 1 ♀); ochreous-whitish; first line usually obsolete, sometimes represented by subdorsal and median fuscous dots at one-third; a median, subcostal, fuscous, discal dot, sometimes obsolete (1 ♂, 3 ♀); postmedian line straight or nearly so, from two-thirds dorsum to beneath five-sixths costa, represented by fine fuscous dots, sometimes connected by a ferruginous line, but sometimes obsolete; a fine fuscous terminal line, sometimes interrupted or reduced to dots; cilia ochreous-whitish. Hindwings with termen rounded; ochreous-grey-whitish; sometimes a discal dot; no postmedian line; terminal line and cilia as forewings.

38. TAXEOTIS STEREOSPILA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1142.

♂. 25-32 mm. ♀. 24-28 mm. Head ochreous-grey-whitish; face ferruginous. Palpi in ♂ 3 to 3½, in ♀ 3½ to 4; pale ferruginous. Antennae pale grey becoming ochreous-whitish towards base; in ♂ laminate, shortly ciliated. Thorax, abdomen and legs ochreous-grey-whitish, more or less irrorated with fuscous. Forewings triangular, costa gently and evenly arched, less so in ♀, apex acute, in ♀ slightly produced, termen slightly rounded, in ♀ slightly sinuate, slightly oblique; 12 free (19 ♂, 9 ♀), but sometimes rather closely approximated to areole; ochreous-grey-whitish, in ♀ often brownish, more or less irrorated with fuscous; costal edge ochreous, in ♂ often reddish-orange, towards base; first line nearly straight, from one-fourth costa to one-fourth dorsum, represented by three or four fuscous dots, that on costa often enlarged, rarely obsolete in ♂, more often in ♀; a small, median, subcostal, fuscous, discal spot with pale centre; postmedian line represented by a fuscous dot on three-fourths costa, not always present, and a disconnected line, sometimes connected by a fuscous streak with apex, from beneath costa near apex to two-thirds dorsum, sinuate, composed of fuscous or ferruginous dots sometimes connected, towards dorsum sometimes suffused or double, less often so in disc; a subterminal line of fuscous dots more or less developed closely follows; a terminal series of blackish dots; cilia ochreous-whitish, sometimes with basal fuscous irroration, which rarely in ♂, but often in ♀, is so dense as to form a distinct line. Hindwings with termen rounded; concolorous; discal dot usually obsolete, when present nearly always minute, never pale-centred; postmedian line usually developed only towards dorsum; terminal dots and cilia as forewings.

Differs from all except the preceding in the pale-centred discal spot of forewing. From *T. adelia*, to which it is allied, it differs also in the longer palpi and ochreous costa.

Queensland: National Park (2,500 feet), Toowoomba, Bunya Mt. (3,500 feet), Warwick, Killarney, Stanthorpe. New South Wales: Sydney, Mt. Wilson (3,500 feet), Bathurst. Victoria: Gisborne, Mansfield.

39. TAXEOTIS ENDELA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1142.—*Prototypa dryina* Turn., *ibid.*, 1916, 252.

♂. 27-32 mm. ♀. 24-32 mm. Head ochreous-whitish, face pale ferruginous. Palpi 2; pale ferruginous, sometimes suffusedly whitish at base. Antennae grey-whitish; in ♂ strongly laminate with rather long ciliations. Thorax, abdomen, and legs ochreous-whitish. Forewings triangular, costa nearly straight except near base and apex, apex pointed, in ♀ acute, termen slightly sinuate, slightly oblique; 12 free but closely approximated to 11 before it joins areole (4 ♂, 2 ♀), or anastomosing with 11 (3 ♂, 1 ♀); ochreous-whitish; first line usually obsolete, sometimes represented by subdorsal and median fuscous dots at one-third; a median, subcostal, fuscous, discal dot, sometimes obsolete (1 ♂, 3 ♀); postmedian line straight or nearly so, from two-thirds dorsum to beneath five-sixths costa, represented by fine fuscous dots, sometimes connected by a ferruginous line, but sometimes obsolete; a fine fuscous terminal line, sometimes interrupted or reduced to dots; cilia ochreous-whitish. Hindwings with termen rounded; ochreous-grey-whitish; sometimes a discal dot; no postmedian line; terminal line and cilia as forewings.

Distinguished by its ochreous-whitish colour and straight postmedian line not connected with costa, and the pale ferruginous underside of wings without markings.

New South Wales: Glen Innes, Ebor, Bathurst, Mittagong. Victoria: Melbourne, Beaconsfield.

40. TAXEOTIS AENIGMATODES, n. sp.

αἰνιγματώδης, obscure, puzzling.

♀. 24-25 mm. Head grey-whitish; face pale ferruginous. Palpi 2½; pale ferruginous, towards base whitish. Antennae grey-whitish. Thorax pale grey. Abdomen whitish with some grey irroration. Legs grey-whitish; anterior pair pale grey. Forewings triangular, costa straight, except near base and apex, apex acutely pointed, termen slightly rounded, slightly oblique; 12 free; whitish rather sparsely, but uniformly irrorated with grey; first line indicated by very obscure median and subdorsal dots; discal dot obsolete; second line pale ferruginous, straight, oblique, from two-thirds dorsum to beneath three-fourths costa; a suffused whitish subterminal line; a fine fuscous terminal line; cilia grey-whitish, with indications of a darker median line. Hindwings with termen only slightly rounded; as forewings, but postmedian and subterminal lines obscure. Underside uniform pale ochreous-grey.

Perhaps allied to *T. endela*, but in the absence of the ♂ its generic position is not quite certain.

New South Wales: Ebor, in January; two specimens.

41. TAXEOTIS ALLOCEROS, n. sp.

ἀλλοκερως, with different antennae.

♂. 30-36 mm. Head grey; face ferruginous-fuscous. Palpi 1¼; ferruginous-fuscous. Antennae grey; very shortly bipectinate (1) almost to apex, the pectinations ending in short ciliations. Thorax grey, sometimes brownish-tinged. Abdomen similar, with a few fuscous scales. Legs fuscous; posterior pair whitish irrorated with fuscous. Forewings triangular, costa moderately and evenly arched, apex acute, slightly produced, termen slightly sinuate, oblique; 12 free (12 ♂); pale grey, sometimes brownish-tinged, sparsely irrorated with dark-fuscous; first line represented by from one to three fuscous dots, median, subdorsal, and dorsal, and by a larger, dark fuscous, oblique spot on costa at one-third; a median, subcostal, dark fuscous, discal dot; postmedian represented by a second oblique dark fuscous spot on costa at two-thirds, and by a disconnected, strongly bisinuate, line of dark fuscous dots, rarely complete and acutely angled line from costa, this is succeeded by a pale line suffusedly edged with fuscous posteriorly, so that postmedian line appears double; there follows closely a subterminal series of dark fuscous dots, pale-edged posteriorly, variably developed, the dorsal spot of the series being larger and blackish; a terminal series of blackish dots; cilia grey-brown irrorated with fuscous, apices paler. Hindwings with termen rounded; as forewings, but without first line; postmedian line strongly bowed in middle.

♀. 32-34 mm. Similar to ♂, but browner and darker in colour. Forewings with 12 free (8 ♀); first line suffused and continuous when developed, and preceded by a pale line; these do not reach first costal spot; postmedian formed by two continuous fuscous lines separated by a conspicuous whitish-ochreous line, all rather sharply angled inwards beneath costa, thence bisinuate to three-fourths dorsum; subterminal slightly developed or obsolete.

Distinguished by its ochreous-whitish colour and straight postmedian line not connected with costa, and the pale ferruginous underside of wings without markings.

New South Wales: Glen Innes, Ebor, Bathurst, Mittagong. Victoria: Melbourne, Beaconsfield.

40. Taxeotis aenigmatodes, n. sp.

αἰνιγματωδης, obscure, puzzling.

♀. 24-25 mm. Head grey-whitish; face pale ferruginous. Palpi 2½; pale ferruginous, towards base whitish. Antennae grey-whitish. Thorax pale grey. Abdomen whitish with some grey irroration. Legs grey-whitish; anterior pair pale grey. Forewings triangular, costa straight, except near base and apex, apex acutely pointed, termen slightly rounded, slightly oblique; 12 free; whitish rather sparsely, but uniformly irrorated with grey; first line indicated by very obscure median and subdorsal dots; discal dot obsolete; second line pale ferruginous, straight, oblique, from two-thirds dorsum to beneath three-fourths costa; a suffused whitish subterminal line; a fine fuscous terminal line; cilia grey-whitish, with indications of a darker median line. Hindwings with termen only slightly rounded; as forewings, but postmedian and subterminal lines obscure. Underside uniform pale ochreous-grey.

Perhaps allied to *T. endela*, but in the absence of the ♂ its generic position is not quite certain.

New South Wales: Ebor, in January; two specimens.

41. Taxeotis alloceros, n. sp.

ἀλλοκερως, with different antennae.

♂. 30-36 mm. Head grey; face ferruginous-fuscous. Palpi 1¼; ferruginous-fuscous. Antennae grey; very shortly bipectinate (1) almost to apex, the pectinations ending in short ciliations. Thorax grey, sometimes brownish-tinged. Abdomen similar, with a few fuscous scales. Legs fuscous; posterior pair whitish irrorated with fuscous. Forewings triangular, costa moderately and evenly arched, apex acute, slightly produced, termen slightly sinuate, oblique; 12 free (12 ♂); pale grey, sometimes brownish-tinged, sparsely irrorated with dark-fuscous; first line represented by from one to three fuscous dots, median, subdorsal, and dorsal, and by a larger, dark fuscous, oblique spot on costa at one-third; a median, subcostal, dark fuscous, discal dot; postmedian represented by a second oblique dark fuscous spot on costa at two-thirds, and by a disconnected, strongly bisinuate, line of dark fuscous dots, rarely complete and acutely angled line from costa, this is succeeded by a pale line suffusedly edged with fuscous posteriorly, so that postmedian line appears double; there follows closely a subterminal series of dark fuscous dots, pale-edged posteriorly, variably developed, the dorsal spot of the series being larger and blackish; a terminal series of blackish dots; cilia grey-brown irrorated with fuscous, apices paler. Hindwings with termen rounded; as forewings, but without first line; postmedian line strongly bowed in middle.

♀. 32-34 mm. Similar to ♂, but browner and darker in colour. Forewings with 12 free (8 ♀); first line suffused and continuous when developed, and preceded by a pale line; these do not reach first costal spot; postmedian formed by two continuous fuscous lines separated by a conspicuous whitish-ochreous line, all rather sharply angled inwards beneath costa, thence bisinuate to three-fourths dorsum; subterminal slightly developed or obsolete.

A very distinct species. The antennal structure of the ♂ is peculiar in the genus, and approaches that of *Antasia*, which differs in the stalking of 6 and 7 of hindwings. In all other respects *alloceros* agrees with *Taxeotis* and is closely related to other species of the genus.

North Queensland: Eungella (2,500 feet) in October. Queensland: Eidsvold in September, Toowoomba (only in rain forest), in September and October, Killarney in November; twenty specimens. New South Wales: Lismore.

42. TAXEOTIS ORPHNINA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 224.

♂. 23 mm. ♀. 24 mm. Head pale grey; face dark-fuscous. Palpi 1¼; dark-fuscous. Antennae pale grey; in ♂ laminated and biciliated in tufts, cilia long (2). Thorax, abdomen and legs grey. Forewings triangular, costa very slightly arched, in ♀ sinuate, apex rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, slightly oblique; 12 connected by a bar with areole (1 ♂, 1 ♀), pale ochreous-grey with slight fuscous irroration, more in ♀, first line represented by a fuscous costal spot at one-third, and sometimes also by median and subdorsal dots, obsolete in ♀; a median, subcostal, fuscous, discal dot or small spot; postmedian line from a fuscous costal spot at two-thirds, angled inwards beneath costa, but upper limb of angle nearly obsolete, thence represented by a nearly straight line of fuscous dots to two-thirds dorsum, in ♀ tinged with ferruginous but nearly obsolete; subterminal fuscous dots slightly developed or obsolete; a terminal series of fine fuscous dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line; postmedian line curved, slightly developed.

Whether this species is distinct from *T. epigaea* must remain uncertain until more material is secured. The neurational distinction of itself appears insufficient, and the only other I can find is the apparently slightly longer ciliations of the antennae of the ♂.

Queensland: Mt. Tambourine, in March and April.

43. TAXEOTIS EPIGAEA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 225.

♂. 26-32 mm. ♀. 29 mm. Head whitish-brown or whitish-grey; face dark fuscous or ferruginous-fuscous. Palpi in ♂ 1¼, in ♀ 1½; dark ferruginous-fuscous. Antennae grey, often whitish-brown towards base; in ♂ laminate, with a double row of tufts of long cilia (1½). Thorax and abdomen grey-brownish. Legs fuscous; posterior pair ochreous-whitish, sometimes irrorated with fuscous. Forewings triangular, costa very slightly arched, apex rather acutely pointed, termen slightly sinuate, moderately oblique; 12 free, but sometimes closely approximated to areole (12 ♂, 1 ♀); grey-brownish or reddish-brown, sparsely irrorated with fuscous, which sometimes forms transverse strigulae; first line represented by a fuscous or ferruginous-fuscous spot on costa at one-third, and a usually disconnected fine fuscous or ferruginous line from one-third dorsum, toothed outwards above dorsum and in middle of disc, sometimes reduced to two small dots, or even obsolete; a median, subcostal, fuscous, discal dot; postmedian arising from a second similar costal spot at two-thirds, angled acutely inwards beneath costa, but upper limb of angle usually undeveloped, thence sinuate to two-thirds dorsum, entire or reduced to a series of dots, fuscous or ferruginous, succeeded by a pale line, sometimes double; a subterminal series of dark fuscous dots variably developed, sometimes

A very distinct species. The antennal structure of the ♂ is peculiar in the genus, and approaches that of *Antasia*, which differs in the stalking of 6 and 7 of hindwings. In all other respects *alloceros* agrees with *Taxeotis* and is closely related to other species of the genus.

North Queensland: Eungella (2,500 feet) in October. Queensland: Eidsvold in September, Toowoomba (only in rain forest), in September and October, Killarney in November; twenty specimens. New South Wales: Lismore.

42. TAXEOTIS ORPHNINA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 224.

♂. 23 mm. ♀. 24 mm. Head pale grey; face dark-fuscous. Palpi 1¼; dark-fuscous. Antennae pale grey; in ♂ laminated and biciliated in tufts, cilia long (2). Thorax, abdomen and legs grey. Forewings triangular, costa very slightly arched, in ♀ sinuate, apex rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, slightly oblique; 12 connected by a bar with areole (1 ♂, 1 ♀), pale ochreous-grey with slight fuscous irroration, more in ♀, first line represented by a fuscous costal spot at one-third, and sometimes also by median and subdorsal dots, obsolete in ♀; a median, subcostal, fuscous, discal dot or small spot; postmedian line from a fuscous costal spot at two-thirds, angled inwards beneath costa, but upper limb of angle nearly obsolete, thence represented by a nearly straight line of fuscous dots to two-thirds dorsum, in ♀ tinged with ferruginous but nearly obsolete; subterminal fuscous dots slightly developed or obsolete; a terminal series of fine fuscous dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line; postmedian line curved, slightly developed.

Whether this species is distinct from *T. epigaea* must remain uncertain until more material is secured. The neurational distinction of itself appears insufficient, and the only other I can find is the apparently slightly longer ciliations of the antennae of the ♂.

Queensland: Mt. Tambourine, in March and April.

43. TAXEOTIS EPIGAEA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 225.

♂. 26-32 mm. ♀. 29 mm. Head whitish-brown or whitish-grey; face dark fuscous or ferruginous-fuscous. Palpi in ♂ 1¼, in ♀ 1½; dark ferruginous-fuscous. Antennae grey, often whitish-brown towards base; in ♂ laminate, with a double row of tufts of long cilia (1½). Thorax and abdomen grey-brownish. Legs fuscous; posterior pair ochreous-whitish, sometimes irrorated with fuscous. Forewings triangular, costa very slightly arched, apex rather acutely pointed, termen slightly sinuate, moderately oblique; 12 free, but sometimes closely approximated to areole (12 ♂, 1 ♀); grey-brownish or reddish-brown, sparsely irrorated with fuscous, which sometimes forms transverse strigulae; first line represented by a fuscous or ferruginous-fuscous spot on costa at one-third, and a usually disconnected fine fuscous or ferruginous line from one-third dorsum, toothed outwards above dorsum and in middle of disc, sometimes reduced to two small dots, or even obsolete; a median, subcostal, fuscous, discal dot; postmedian arising from a second similar costal spot at two-thirds, angled acutely inwards beneath costa, but upper limb of angle usually undeveloped, thence sinuate to two-thirds dorsum, entire or reduced to a series of dots, fuscous or ferruginous, succeeded by a pale line, sometimes double; a subterminal series of dark fuscous dots variably developed, sometimes pale-edged posteriorly, that above dorsum sometimes enlarged; a terminal series of blackish dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line; post median line usually faint.

Variable; best distinguished by structural characters of palpi and antennae from all but the preceding.

North Queensland: Kuranda near Cairns, Herberton, Eungella. Queensland: Mt. Tambourine, National Park (2,000 feet to 3,000 feet), Toowoomba. From September to November.

44. TAXEOTIS COMPAR, n. sp.

compar, similar.

♂. 26-28 mm. ♀. 30 mm. Head pale-grey; face ferruginous-fuscous. Palpi in ♂ 1½, in ♀ 2; ferruginous-fuscous. Antennae ochreous-grey-whitish becoming grey towards apices; in ♂ slightly laminate, shortly ciliated (½). Thorax and abdomen pale ochreous-grey with a few fuscous scales. Legs ochreous-grey, posterior pair ochreous-whitish, with more or less fuscous irroration. Forewings triangular, costa nearly straight, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, slightly oblique; 12 free (3 ♂, 2 ♀); pale ochreous-grey, in ♀ brownish, with a few fuscous scales; first line from a fuscous spot on one-third costa, outwardly curved to one-third dorsum, interrupted, or represented by two dots, ferruginous-fuscous, in ♀ faint or obsolete; a median, subcostal, fuscous, discal dot or spot; postmedian line from a second fuscous costal spot (both spots may be obsolete in ♀), angled inwards beneath costa, but upper limb of angle often not developed, sinuate to two-thirds dorsum, fuscous-ferruginous, sometimes reduced to a series of dots, succeeded by a pale line, which is usually edged posteriorly with fuscous, so that postmedian line appears double; sometimes a suffused streak from apex to postmedian line; a subterminal series of fuscous dots, pale-edged posteriorly, variably developed; a terminal series of blackish dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line, and often without discal dot.

Allied and very similar to *T. epigaea*, yet certainly distinct by the short antennal ciliations of ♂.

Queensland: Toowoomba in November; five specimens received from Mr. W. B. Barnard.

Genus 3. ANTASIA.

Darantasia Wlk., *Cat. Brit. Mus.*, xxvi, 1743 (*praeocc.*).—*Antasia* Warr., *Novit. Zool.*, 1894, 366; Prout, *Gen. Insect.*, Oenochrom., p. 31.

Face smooth, with a small anterior tuft at lower edge. Tongue present. Palpi moderate, porrect, thickened with appressed hairs. Antennae of ♂ shortly bipectinate to near apex. Thorax and abdomen slender; the former slightly hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 connected by a bar with areole. Hindwings with 6 and 7 stalked, 12 approximated to cell to near its end.

Contains only the following species:—

45. ANTASIA FLAVICAPITATA.

Tephrina flavicapitata Gn., *Lep.*, x, 98.—*Tephrina capitata* Wlk., *Cat. Brit. Mus.*, xxiii, 965.—*Darantasia mundiferaria* Wlk., *ibid.*, xxvi, 1743.—*Darantasia* pale-edged posteriorly, that above dorsum sometimes enlarged; a terminal series of blackish dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line; post median line usually faint.

Variable; best distinguished by structural characters of palpi and antennae from all but the preceding.

North Queensland: Kuranda near Cairns, Herberton, Eungella. Queensland: Mt. Tambourine, National Park (2,000 feet to 3,000 feet), Toowoomba. From September to November.

44. TAXEOTIS COMPAR, n. sp.

compar, similar.

♂. 26-28 mm. ♀. 30 mm. Head pale-grey; face ferruginous-fuscous. Palpi in ♂ 1½, in ♀ 2; ferruginous-fuscous. Antennae ochreous-grey-whitish becoming grey towards apices; in ♂ slightly laminate, shortly ciliated (½). Thorax and abdomen pale ochreous-grey with a few fuscous scales. Legs ochreous-grey, posterior pair ochreous-whitish, with more or less fuscous irroration. Forewings triangular, costa nearly straight, apex in ♂ rather acutely pointed, in ♀ acute and slightly produced, termen slightly sinuate, slightly oblique; 12 free (3 ♂, 2 ♀); pale ochreous-grey, in ♀ brownish, with a few fuscous scales; first line from a fuscous spot on one-third costa, outwardly curved to one-third dorsum, interrupted, or represented by two dots, ferruginous-fuscous, in ♀ faint or obsolete; a median, subcostal, fuscous, discal dot or spot; postmedian line from a second fuscous costal spot (both spots may be obsolete in ♀), angled inwards beneath costa, but upper limb of angle often not developed, sinuate to two-thirds dorsum, fuscous-ferruginous, sometimes reduced to a series of dots, succeeded by a pale line, which is usually edged posteriorly with fuscous, so that postmedian line appears double; sometimes a suffused streak from apex to postmedian line; a subterminal series of fuscous dots, pale-edged posteriorly, variably developed; a terminal series of blackish dots; cilia concolorous. Hindwings with termen rounded; as forewings, but without first line, and often without discal dot.

Allied and very similar to *T. epigaea*, yet certainly distinct by the short antennal ciliations of ♂.

Queensland: Toowoomba in November; five specimens received from Mr. W. B. Barnard.

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Face smooth, with a small anterior tuft at lower edge. Tongue present. Palpi moderate, porrect, thickened with appressed hairs. Antennae of ♂ shortly bipectinate to near apex. Thorax and abdomen slender; the former slightly hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 connected by a bar with areole. Hindwings with 6 and 7 stalked, 12 approximated to cell to near its end.

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New South Wales: Katoomba, Adaminaby. Victoria: Melbourne, Beaconsfield, Gisborne. Tasmania: Hobart, St. Helen's, Launceston, Strahan. South Australia: Mt. Lofty.

Genus 4. TAPINOGYNA.

Prout, *Gen. Insect.*, Oenochrom., p. 32.

Face smooth, without tuft. Tongue present. Palpi moderate, porrect, thickened with appressed hairs. Antennae of ♂ moderately bipectinate to near apex. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 connected by a bar with areole. Hindwings with 6 and 7 connate or approximated at origin, 12 approximated to cell to about middle, thence gradually diverging.

There is only one species which is certainly related to *Antasia*. but the differences in the neuration of the hindwings are sufficient to justify generic separation.

46. TAPINOGYNA PERICHROA.

Darantasia perichroa Low., *Trans. Roy. Soc. S. Aust.*, 1903, 187.

♂. 25-30 mm. ♀. 20-25 mm. Head grey, anterior edge sometimes whitish; face blackish. Palpi 2¼ to 2½; blackish, at base sharply white. Antennae in ♂ grey-whitish, in ♀ grey; pectinations in ♂ 2½. Thorax fuscous-grey, sometimes reddish-tinged. Abdomen grey. Legs fuscous, with some whitish irroration. Forewings rather broadly triangular, not so broad in ♀, costa gently arched, apex in ♂ round-pointed, in ♀ pointed, termen nearly straight, slightly oblique; pale grey, slightly reddish-tinged, with slight fuscous irroration; costa sometimes reddish-suffused; first line at one-fourth, represented by two or three fuscous dots; a median, subcostal, fuscous discal dot; postmedian at three-fourths, sinuate, represented by a series of fuscous dots; occasionally a short series of subterminal dots from costa; a terminal series of blackish dots, rarely obsolete; cilia pale grey, with a few darker scales. Hindwings with termen rounded; pale grey; a few fuscous scales on dorsum; usually a terminal series of fuscous dots; cilia pale grey.

Victoria: Stawell, Birchip, Sea Lake. South Australia: Pinnaroo. Western Australia: Perth.

Genus 5. CATHAEMACTA, nov.

καθαιμακτος, blood-stained.

Type, *C. thermistis* Low.

Face smooth. Tongue present. Palpi moderate (less than 2), porrect, shortly rough-scaled. Antennae of ♂ bipectinate almost to apex. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose, or with minute spurs on posterior pair only. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 free. Hindwings with 6 and 7 separate, 12 approximated to cell to about middle, thence gradually diverging.

Differs from *Nearcha* in the separation of 6 and 7 of the hindwings and early divergence of subcostal vein from cell; from *Epidesmia* in the shorter palpi and *flavicapitata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1152.—*Antasia flavicapitata* Prout, *Gen. Insect.*. Oenochrom., Pl. i, f. 12.

New South Wales: Katoomba, Adaminaby. Victoria: Melbourne, Beaconsfield, Gisborne. Tasmania: Hobart, St. Helen's, Launceston, Strahan. South Australia: Mt. Lofty.

Genus 4. TAPINOGYNA.

Prout, *Gen. Insect.*, Oenochrom., p. 32.

Face smooth, without tuft. Tongue present. Palpi moderate, porrect, thickened with appressed hairs. Antennae of ♂ moderately bipectinate to near apex. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 connected by a bar with areole. Hindwings with 6 and 7 connate or approximated at origin, 12 approximated to cell to about middle, thence gradually diverging.

There is only one species which is certainly related to *Antasia*, but the differences in the neuration of the hindwings are sufficient to justify generic separation.

46. TAPINOGYNA PERICHROA.

Darantasia perichroa Low., *Trans. Roy. Soc. S. Aust.*, 1903, 187.

♂. 25-30 mm. ♀. 20-25 mm. Head grey, anterior edge sometimes whitish; face blackish. Palpi 2¼ to 2½; blackish, at base sharply white. Antennae in ♂ grey-whitish, in ♀ grey; pectinations in ♂ 2½. Thorax fuscous-grey, sometimes reddish-tinged. Abdomen grey. Legs fuscous, with some whitish irroration. Forewings rather broadly triangular, not so broad in ♀, costa gently arched, apex in ♂ round-pointed, in ♀ pointed, termen nearly straight, slightly oblique; pale grey, slightly reddish-tinged, with slight fuscous irroration; costa sometimes reddish-suffused; first line at one-fourth, represented by two or three fuscous dots; a median, subcostal, fuscous discal dot; postmedian at three-fourths, sinuate, represented by a series of fuscous dots; occasionally a short series of subterminal dots from costa; a terminal series of blackish dots, rarely obsolete; cilia pale grey, with a few darker scales. Hindwings with termen rounded; pale grey; a few fuscous scales on dorsum; usually a terminal series of fuscous dots; cilia pale grey.

Victoria: Stawell, Birchip, Sea Lake. South Australia: Pinnaroo. Western Australia: Perth.

Genus 5. CATHAEMACTA, nov.

καθαιμακτος, blood-stained.

Type, *C. thermistis* Low.

Face smooth. Tongue present. Palpi moderate (less than 2), porrect, shortly rough-scaled. Antennae of ♂ bipectinate almost to apex. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose, or with minute spurs on posterior pair only. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 free. Hindwings with 6 and 7 separate, 12 approximated to cell to about middle, thence gradually diverging.

Differs from *Nearcha* in the separation of 6 and 7 of the hindwings and early divergence of subcostal vein from cell; from *Epidesmia* in the shorter palpi and bipectinate antennae of ♂; from *Tapinogyna* in the absence of a bar between subcostal vein and areole.

47. CATHAEMACTA THERMISTIS.

Epidesmia thermistis Low., *Trans. Roy. Soc. S. Aust.*, 1894, 81.—*Epidesmia cygnaea* Prout, *Gen. Insect.*, Oenochrom., p. 37, Pl. i, f. 17.

♂. 34-42 mm. Head grey, usually purple- or reddish-tinged; face dark red. Palpi 1½; dark red. Antennae ochreous-whitish; pectinations in ♂ 6. Thorax grey or purple-grey. Abdomen pale grey. Legs fuscous; middle and posterior tibiae and tarsi grey-whitish. Forewings triangular, costa straight, slightly arched towards base and apex, apex pointed, termen slightly rounded, moderately oblique; purple-grey sparsely irrorated with dark fuscous; costal edge red towards base; a fuscous dot on one-fourth dorsum, from which usually proceeds a straight red line towards, but not reaching, one-fourth costa; a median, subdorsal, dark fuscous, discal dot; a straight red line from two-thirds dorsum almost reaching costa near apex, more or less suffused with dark fuscous, and followed by a series of blackish dots; a terminal series of blackish dots; cilia pale grey or reddish-grey irrorated with dark fuscous. Hindwings with termen only slightly rounded; pale grey becoming whitish towards base; discal dot faint or absent; cilia pale grey with fuscous irroration.

Lower's type is a ♂ without antennae or palpi, Prout's a ♀ in Coll. Lyell.

South Australia: Adelaide. Western Australia: Perth, Waroona, Collie.

48. CATHAEMACTA LOXOMOCHLA, n. sp.

λοξομοχλος, obliquely barred.

♂. 26 mm. Head, thorax and abdomen grey. (Palpi broken off.) Antennae grey; pectinations in ♂ short (1), each ending in a tuft of short cilia. Legs fuscous; posterior pair grey-whitish. Forewings rather elongate-triangular, costa gently arched, apex pointed, termen very slightly rounded, rather strongly oblique; grey sparsely irrorated with fuscous; a subcostal, blackish, discal dot slightly beyond middle; a black, gently doubly sinuate line from mid-dorsum towards, but not quite reaching, apex; a very obscure pale line parallel to this and about midway between it and termen; a terminal series of blackish dots; cilia grey. Hindwings with termen nearly straight, apex rounded; grey; a straight blackish line from three-fifths dorsum reaching three-fourths across disc; an obscure pale subterminal line; terminal dots and cilia as forewings.

I have no hesitation in referring this very distinct species to the genus *Cathaemacta*, although the antennal pectinations are much shorter than in the type, and the palpi are unfortunately missing.

Western Australia: Merredin; one specimen received from Mr. L. J. Newman.

Genus 6. ECPHYAS, nov.

ἐκφυας, an off-shoot.

Face smooth. Tongue present. Palpi long, porrect. Antennae of ♂ unipectinate to near apex. Thorax and abdomen slender; the former slightly hairy beneath. Femora smooth. Tarsi spinulose. Forewings without areole, 10 from cell, closely approximated to, but not connected with, 9, 11 anastomosing strongly with 10. Hindwings with 6 and 7 approximated at origin, 12 approximated to cell to about middle, thence diverging.

bipectinate antennae of ♂; from *Tapinogyna* in the absence of a bar between subcostal vein and areole.

47. CATHAEMACTA THERMISTIS.

Epidesmia thermistis Low., *Trans. Roy. Soc. S. Aust.*, 1894, 81.—*Epidesmia cygnaea* Prout, *Gen. Insect.*, Oenochrom., p. 37, Pl. i, f. 17.

♂. 34-42 mm. Head grey, usually purple- or reddish-tinged; face dark red. Palpi 1½; dark red. Antennae ochreous-whitish; pectinations in ♂ 6. Thorax grey or purple-grey. Abdomen pale grey. Legs fuscous; middle and posterior tibiae and tarsi grey-whitish. Forewings triangular, costa straight, slightly arched towards base and apex, apex pointed, termen slightly rounded, moderately oblique; purple-grey sparsely irrorated with dark fuscous; costal edge red towards base; a fuscous dot on one-fourth dorsum, from which usually proceeds a straight red line towards, but not reaching, one-fourth costa; a median, subdorsal, dark fuscous, discal dot; a straight red line from two-thirds dorsum almost reaching costa near apex, more or less suffused with dark fuscous, and followed by a series of blackish dots; a terminal series of blackish dots; cilia pale grey or reddish-grey irrorated with dark fuscous. Hindwings with termen only slightly rounded; pale grey becoming whitish towards base; discal dot faint or absent; cilia pale grey with fuscous irroration.

Lower's type is a ♂ without antennae or palpi, Prout's a ♀ in Coll. Lyell.

South Australia: Adelaide. Western Australia: Perth, Waroona, Collie.

48. CATHAEMACTA LOXOMOCHLA, n. sp.

λοξομοχλος, obliquely barred.

♂. 26 mm. Head, thorax and abdomen grey. (Palpi broken off.) Antennae grey; pectinations in ♂ short (1), each ending in a tuft of short cilia. Legs fuscous; posterior pair grey-whitish. Forewings rather elongate-triangular, costa gently arched, apex pointed, termen very slightly rounded, rather strongly oblique; grey sparsely irrorated with fuscous; a subcostal, blackish, discal dot slightly beyond middle; a black, gently doubly sinuate line from mid-dorsum towards, but not quite reaching, apex; a very obscure pale line parallel to this and about midway between it and termen; a terminal series of blackish dots; cilia grey. Hindwings with termen nearly straight, apex rounded; grey; a straight blackish line from three-fifths dorsum reaching three-fourths across disc; an obscure pale subterminal line; terminal dots and cilia as forewings.

I have no hesitation in referring this very distinct species to the genus *Cathaemacta*, although the antennal pectinations are much shorter than in the type, and the palpi are unfortunately missing.

Western Australia: Merredin; one specimen received from Mr. L. J. Newman.

Genus 6. ECPHYAS, nov.

ἐκφυας, an off-shoot.

Face smooth. Tongue present. Palpi long, porrect. Antennae of ♂ unipectinate to near apex. Thorax and abdomen slender; the former slightly hairy beneath. Femora smooth. Tarsi spinulose. Forewings without areole, 10 from cell, closely approximated to, but not connected with, 9, 11 anastomosing strongly with 10. Hindwings with 6 and 7 approximated at origin, 12 approximated to cell to about middle, thence diverging.

A simple development of *Epidesmia*, from which it differs only in the disconnection of 10 from 9 causing disappearance of the areole.

49. Ecphyas holopsara, n. sp.

ὁλοψαρος, wholly grey.

♂, ♀. 42-45 mm. Head pale grey. Palpi 3½; pale grey. Antennae pale grey; pectinations in ♂ 3½. Thorax, abdomen, and legs pale grey. Forewings triangular, costa slightly arched, apex acute, termen sinuate, slightly oblique; pale ochreous-grey, sometimes with a few scattered fuscous scales; costal edge ochreous; first line obsolete, or represented by two faint dots; a median, subcostal, fuscous, discal dot; postmedian line nearly straight, from five-sixths costa to two-thirds dorsum, fuscous, sometimes edged with ochreous anteriorly, posteriorly suffused; a darker grey terminal band follows this, sometimes containing a crenulate fuscous subterminal line; cilia whitish-ochreous. Hindwings with termen nearly straight, tornus and apex rounded; grey; an antemedian fuscous discal dot; a median fuscous transverse line; cilia grey.

Western Australia: Mount Dale in January, Albany in February and March; three specimens received from Mr. W. B. Barnard, who has the type.

Genus 7. Systatica.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 229.

Face smooth, not projecting. Tongue present. Palpi moderately long, ascending, closely appressed to face, reaching vertex, shortly rough-haired; terminal joint concealed. Antennae in both sexes unipectinate. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi minutely spinulose. Forewings with 7, 8, 9 stalked, 10 and 11 long-stalked from cell, separating on same level as 7, but 10 not connected with 9, 12 free. Hindwings with 6 from upper angle of cell, 7 from slightly above angle, 12 closely approximated to cell to beyond middle, thence diverging.

A development of *Epidesmia*, 10 and 11 being completely fused at origin as in *Satraparchis*, and 10 failing to anastomose with 9 as in *Ecphyas*, the areole being lost by separation. It is not intermediate between *Epidesmia* and *Oenochroma* as I at one time supposed. There is only one species known.

50. Systatica xanthastis.

Monoctenia ? xanthastis Low., *Trans. Roy. Soc. S. Aust.*, 1894, 85.—*Systatica xanthastis* Turn., *ibid.*, 1904, 229.

♂. 54-58 mm. ♀. 70 mm. Head and thorax pale brown, face dark fuscous-brown. Palpi dark fuscous-brown; basal joint red. Antennae fuscous; pectinations in both sexes 2½, apical one-fourth in ♂, apical two-fifths in ♀ simple. Abdomen pale ochreous-brown. Legs fuscous; coxae orange-brown. Forewings triangular, costa strongly arched at base, thence straight nearly to apex, apex acute, slightly produced, termen sinuate beneath apex, rather strongly bowed above middle; pale ochreous-brown, along costa and in terminal area suffused with brown; a nearly straight dark-brown line from one-third costa to beyond one-fourth dorsum; a linear, transverse, median, subcostal, brown discal mark; a dark brown line from costa at five-sixths slightly incurved to dorsum before three-fourths; a very strongly and acutely dentate, slender, pale, subterminal line; cilia dark brown, bases paler. Hindwings with termen slightly rounded; orange-

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A simple development of *Epidesmia*, from which it differs only in the disconnection of 10 from 9 causing disappearance of the areole.

49. ECPHYAS HOLOPSARA, n. sp.

ὀλοψαρος, wholly grey.

♂, ♀. 42-45 mm. Head pale grey. Palpi 3½; pale grey. Antennae pale grey; pectinations in ♂ 3½. Thorax, abdomen, and legs pale grey. Forewings triangular, costa slightly arched, apex acute, termen sinuate, slightly oblique; pale ochreous-grey, sometimes with a few scattered fuscous scales; costal edge ochreous; first line obsolete, or represented by two faint dots; a median, subcostal, fuscous, discal dot; postmedian line nearly straight, from five-sixths costa to two-thirds dorsum, fuscous, sometimes edged with ochreous anteriorly, posteriorly suffused; a darker grey terminal band follows this, sometimes containing a crenulate fuscous subterminal line; cilia whitish-ochreous. Hindwings with termen nearly straight, tornus and apex rounded; grey; an antemedian fuscous discal dot; a median fuscous transverse line; cilia grey.

Western Australia: Mount Dale in January, Albany in February and March; three specimens received from Mr. W. B. Barnard, who has the type.

Genus 7. SYSTATICA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 229.

Face smooth, not projecting. Tongue present. Palpi moderately long, ascending, closely appressed to face, reaching vertex, shortly rough-haired; terminal joint concealed. Antennae in both sexes unipectinate. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi minutely spinulose. Forewings with 7, 8, 9 stalked, 10 and 11 long-stalked from cell, separating on same level as 7, but 10 not connected with 9, 12 free. Hindwings with 6 from upper angle of cell, 7 from slightly above angle, 12 closely approximated to cell to beyond middle, thence diverging.

A development of *Epidesmia*, 10 and 11 being completely fused at origin as in *Satraparchis*, and 10 failing to anastomose with 9 as in *Ecphyas*, the areole being lost by separation. It is not intermediate between *Epidesmia* and *Oenochroma* as I at one time supposed. There is only one species known.

50. SYSTATICA XANTHASTIS.

Monoctenia ? xanthastis Low., *Trans. Roy. Soc. S. Aust.*, 1894, 85.—*Systatica xanthastis* Turn., *ibid.*, 1904, 229.

♂. 54-58 mm. ♀. 70 mm. Head and thorax pale brown, face dark fuscous-brown. Palpi dark fuscous-brown; basal joint red. Antennae fuscous; pectinations in both sexes 2½, apical one-fourth in ♂, apical two-fifths in ♀ simple. Abdomen pale ochreous-brown. Legs fuscous; coxae orange-brown. Forewings triangular, costa strongly arched at base, thence straight nearly to apex, apex acute, slightly produced, termen sinuate beneath apex, rather strongly bowed above middle; pale ochreous-brown, along costa and in terminal area suffused with brown; a nearly straight dark-brown line from one-third costa to beyond one-fourth dorsum; a linear, transverse, median, subcostal, brown discal mark; a dark brown line from costa at five-sixths slightly incurved to dorsum before three-fourths; a very strongly and acutely dentate, slender, pale, subterminal line; cilia dark brown, bases paler. Hindwings with termen slightly rounded; orange-ochreous with slight brownish suffusion towards tornus and dorsum; a nearly straight, postmedian, brown, transverse line; cilia brown, bases ochreous. Underside of forewings orange, costal and terminal areas, but not apex, fuscous-brown; of hindwings orange densely strigulated with fuscous-brown.

Queensland: Gympie, Nambour, Mt. Tambourine. New South Wales: Lismore, Allyn River, Mt. Wilson.

Genus 8. SATRAPARCHIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1158; Prout, *Gen. Insect.*, Oenochrom., 37.

Face smooth. Tongue present. Palpi long, porrect, loosely rough-haired. Antennae in ♂ unipectinate. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with areole present, simple, 11 being fused to areole from base, 12 free. Hindwings with 6 and 7 stalked, 12 closely approximated to cell from near base to about three-fourths, thence diverging.

Only one species is known, which has retained the wing-pattern of an *Epidesmia*, with important differences in neuration. The areole is small and the bases of veins 10 and 11 are completely fused, so that what was once a double areole has become single.

51. SATRAPARCHIS BIJUGATA.

Panagra bijugata Wlk., *Cat. Brit. Mus.*, xxvi, 1663.—*Melanippe teliferata* Wlk., *ibid.*, 1712.—*Satraparchis bijugata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1158.

Queensland: Rockhampton, Duaringa, Brisbane. New South Wales: Grafton, Sydney.

Genus 9. EPIDESMIA.

Westw., Duncan's Exot. Moths, 1840, 220; Meyr., PROC. LINN. SOC. N.S.W., 1889, 1159; Prout, *Gen. Insect.*, Oenochrom., 36.

Type, *E. tricolor* Westw.

Face smooth, rarely with loose projecting hairs. Tongue present. Palpi long or very long, porrect, rough-haired above and beneath. Antennae in ♂ unipectinate, towards apex simple, pectinations moderate or long. Thorax and abdomen slender; the former slightly or not hairy beneath. Femora smooth. Tarsi not spinulose, or with minute spurs on posterior tarsi only. Forewings with areole present, 11 anastomosing strongly to form a double areole, 12 free. Hindwings with 6 and 7 connate or closely approximated at origin, 12 approximated to cell as far as middle or two-thirds, thence diverging.

Key to Species.

1. Palpi very long, 3 to 6 2
Palpi moderately long, less than 3 9
2. Forewings with a broadly elbowed, white, transverse fascia .... *tricolor.* 52
Forewings without white fascia 3
3. Hindwings fuscous with white transverse line .... *oxyderces.* 53
Hindwings not so 4
4. Hindwings orange .... *chilonaria.* 54
Hindwings not orange 5
5. Palpi fuscous with sharply defined white basal area 6
Palpi grey, sometimes white at base 7

ochreous with slight brownish suffusion towards tornus and dorsum; a nearly straight, postmedian, brown, transverse line; cilia brown, bases ochreous. Underside of forewings orange, costal and terminal areas, but not apex, fuscous-brown; of hindwings orange densely strigulated with fuscous-brown.

Queensland: Gympie, Nambour, Mt. Tambourine. New South Wales: Lismore, Allyn River, Mt. Wilson.

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Queensland: Rockhampton, Duaringa, Brisbane. New South Wales: Grafton, Sydney.

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Palpi grey, sometimes white at base 7

6.	Hindwings with termen sinuate	*hypenaria.*	55
	Hindwings with termen not sinuate	*tryxaria.*	56
7.	Palpi white at base	*perfabricata.*	57
	Palpi not white at base		8
8.	Forewings with straight dotted postmedian line	*reservata.*	58
	Forewings with postmedian line not straight, not dotted	*brachygrammella.*	59
9.	Wings purple or reddish	*phoenicina.*	60
	Wings not purple or reddish		10
10.	Forewings fuscous with white lines from costa to tornus		11
	Forewings grey with two blackish streaks from dorsum	*pachygramma.*	63
11.	Hindwings white	*replicataria.*	61
	Hindwings grey	*transcissata.*	62

52. Epidesmia tricolor.

Westw., Duncan's Exot. Moths, p. 220, Pl. 28, f. 1; Meyr., Proc. Linn. Soc. N.S.W., 1889, 1159.

Queensland: Mt. Tambourine. New South Wales: Tuncurry, Sydney.

53. Epidesmia oxyderces.

Meyr., Proc. Linn. Soc. N.S.W., 1889, 1165.

Queensland: Mt. Tambourine, National Park (2,500 feet). New South Wales: Gosford, Sydney.

54. Epidesmia chilonaria.

Hemagalma chilonaria H.-Sch., *Ausser. Schmet.*, i, Pl. 62, f. 350—*Panagra aurinaria* Gn., *Lep.*, x, 127, Pl. 7, f. 7.—*Epidesmia chilonaria* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1162.

Queensland: Nambour, Mt. Tambourine, National Park (2,500 feet), Toowoomba, Bunya Mts. New South Wales: Lismore, Ben Lomond, Dorrigo, Newcastle, Sydney. Victoria: Fernshaw, Beaconsfield, Gisborne.

55. Epidesmia hypenaria.

Panagra hypenaria Gn., *Lep.*, x, 128.—*Hemagalma inspersa* Feld., *Reise Novara*, Pl. 129, f. 19.—*Epidesmia hypenaria* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1163; Prout, *Gen. Insect.*, Oenochrom., Pl. 1, f. 8.

New South Wales: Glen Innes, Ebor, Newcastle, Sydney, Katoomba, Mt. Wilson. Victoria: Melbourne, Beaconsfield, Gisborne, Dunkeld. Tasmania: Hobart, Mt. Wellington (2,500 feet), Russell Falls, Lake Fenton, St. Helen's, Launceston, Deloraine, Cradle Mt. (3,000 feet).

56. Epidesmia tryxaria.

Panagra tryxaria Gn., *Lep.*, x, 128.—*Epidesmia tryxaria* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1164.—*Epidesmia phaedropa* Low., *Trans. Roy. Soc. S. Aust.*, 1893, 287.

North Queensland: Cairns, Atherton, Herberton, Mackay. Queensland: Yeppoon, Gympie, Nambour, Caloundra, Brisbane, Stradbroke Is., Mt. Tambourine, National Park (2,500 to 3,000 feet), Blackbutt, Toowoomba, Stanthorpe. New South Wales: Lismore, Port Macquarie, Gosford, Sydney, Bulli, Jervis Bay. Victoria: Beaconsfield.

57. Epidesmia perfabricata.

Panagra perfabricata Wlk., *Cat. Brit. Mus.*, xxiii, 996.—*Epidesmia perfabricata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1165.

6. Hindwings with termen sinuate .... *hypenaria*. 55
Hindwings with termen not sinuate .... *tryxaria*. 56
7. Palpi white at base .... *perfabricata*. 57
Palpi not white at base 8
8. Forewings with straight dotted postmedian line .... *reservata*. 58
Forewings with postmedian line not straight, not dotted ..... *brachygrammella*. 59
9. Wings purple or reddish .... *phoenicina*. 60
Wings not purple or reddish 10
10. Forewings fuscous with white lines from costa to tornus 11
Forewings grey with two blackish streaks from dorsum .... *pachygramma*. 63
11. Hindwings white .... *replicataria*. 61
Hindwings grey .... *transcissata*. 62

52. Epidesmia tricolor.

Westw., Duncan's Exot. Moths, p. 220, Pl. 28, f. 1; Meyr., Proc. Linn. Soc. N.S.W., 1889, 1159.

Queensland: Mt. Tambourine. New South Wales: Tuncurry, Sydney.

53. Epidesmia oxyderces.

Meyr., Proc. Linn. Soc. N.S.W., 1889, 1165.

Queensland: Mt. Tambourine, National Park (2,500 feet). New South Wales: Gosford, Sydney.

54. Epidesmia chilonaria.

Hemagalma chilonaria H.-Sch., *Ausser. Schmet.*, i, Pl. 62, f. 350—*Panagra aurinaria* Gn., *Lep.*, x, 127, Pl. 7, f. 7.—*Epidesmia chilonaria* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1162.

Queensland: Nambour, Mt. Tambourine, National Park (2,500 feet), Toowoomba, Bunya Mts. New South Wales: Lismore, Ben Lomond, Dorrigo, Newcastle, Sydney. Victoria: Fernshaw, Beaconsfield, Gisborne.

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New South Wales: Glen Innes, Ebor, Newcastle, Sydney, Katoomba, Mt. Wilson. Victoria: Melbourne, Beaconsfield, Gisborne, Dunkeld. Tasmania: Hobart, Mt. Wellington (2,500 feet), Russell Falls, Lake Fenton, St. Helen's, Launceston, Deloraine, Cradle Mt. (3,000 feet).

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North Queensland: Cairns, Atherton, Herberton, Mackay. Queensland: Yeppoon, Gympie, Nambour, Caloundra, Brisbane, Stradbroke Is., Mt. Tambourine, National Park (2,500 to 3,000 feet), Blackbutt, Toowoomba, Stanthorpe. New South Wales: Lismore, Port Macquarie, Gosford, Sydney, Bulli, Jervis Bay. Victoria: Beaconsfield.

57. Epidesmia perfabricata.

Panagra perfabricata Wlk., *Cat. Brit. Mus.*, xxiii, 996.—*Epidesmia perfabricata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1165.

Queensland: Duaringa, Stradbroke Is., Toowoomba, Warwick. New South Wales: Glen Innes, Bathurst, Mt. Kosciusko (3,000 feet). Victoria: Beaconsfield, Gisborne.

58. EPIDESMIA RESERVATA.

Panagra reservata Wlk., *Cat. Brit. Mus.*, xxiii, 996.—*Epidesmia reservata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1166.

North Australia: Darwin, Melville Is. North Queensland: Cape York, Claudie River, Cairns, Herberton, Mackay. Queensland: Rockhampton, Duaringa, Eidsvold, Nambour, Brisbane, Stradbroke Is., Mt. Tambourine.

Also from New Guinea.

59. EPIDESMIA BRACHYGRAMMELLA.

Low., *Trans. Roy. Soc. S. Aust.*, 1893, 287.

♂, ♀. 44 mm. Head pale grey; face grey. Palpi 6; grey. Antennae pale grey; pectinations in ♂ 6. Thorax, abdomen, and legs pale grey. Forewings triangular, costa arched towards base, thence straight, apex acute, very slightly produced, termen gently rounded, moderately oblique; pale ochreous-grey; first line from one-fourth costa, pale fuscous, scarcely traceable, at first outwardly oblique, then angled inwards, thickened and blackish below middle with a posterior acute tooth, fading again at its termination at one-third dorsum; a median, subcostal, dark fuscous, discal dot; postmedian line from five-sixths costa, pale fuscous, indistinct, inwardly oblique, at one-third from costa thickened and blackish, doubly sinuate with two slight posterior teeth in disc, and an acute anterior tooth above dorsum, bent inwards and fading towards its termination at two-thirds dorsum; a subterminal series of fuscous dots; some indistinct terminal fuscous dots; cilia pale ochreous-grey. Hindwings with termen straight, apex and tornus rounded; pale ochreous-grey; a fuscous discal dot before middle; indistinct suffused postmedian and subterminal lines; cilia pale ochreous-grey.

Redescribed from Lower's type, which is in the South Australian Museum, and very distinct from any other species. The second example is a ♀ in Coll. Lyell.

Victoria: Croydon, near Melbourne, National Park (Wilson's Promontory).

60. EPIDESMIA PHOENICINA, n. sp.

φοινικινος, purplish.

♂. 40 mm. Head pale grey with a whitish line between antennae. Palpi 2½; pale grey. Antennae whitish-grey; pectinations in ♂ 6. Thorax purple-grey. Abdomen purple-grey; beneath mostly whitish. Legs purple-grey mixed with whitish, tarsi dark fuscous annulated with ochreous-whitish. Forewings triangular, costa straight to near apex, apex acute, termen sinuate, slightly oblique; purple-grey; a whitish costal line almost to apex; first line at one-fourth, fuscous, dentate, very fine and indistinct; a median, subcostal, discal dot, whitish, edged with fuscous; postmedian line straight, from three-fourths costa to two-thirds dorsum, slightly darker, lower half edged anteriorly with whitish; a subterminal series of minute fuscous dots, edged anteriorly with whitish, and connected with termen by fine whitish lines on veins; a terminal series of fuscous dots; cilia purple, apices whitish. Hindwings with termen rounded; as forewings, but without first line; a straight, distinct, transverse, median line. Underside whitish, Queensland: Duaringa, Stradbroke Is., Toowoomba, Warwick. New South Wales: Glen Innes, Bathurst, Mt. Kosciusko (3,000 feet). Victoria: Beaconsfield, Gisborne.

58. EPIDESMIA RESERVATA.

Panagra reservata Wlk., *Cat. Brit. Mus.*, xxiii, 996.—*Epidesmia reservata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1166.

North Australia: Darwin, Melville Is. North Queensland: Cape York, Claudie River, Cairns, Herberton, Mackay. Queensland: Rockhampton, Duaringa, Eidsvold, Nambour, Brisbane, Stradbroke Is., Mt. Tambourine.

Also from New Guinea.

59. EPIDESMIA BRACHYGRAMMELLA.

Low., *Trans. Roy. Soc. S. Aust.*, 1893, 287.

♂, ♀. 44 mm. Head pale grey; face grey. Palpi 6; grey. Antennae pale grey; pectinations in ♂ 6. Thorax, abdomen, and legs pale grey. Forewings triangular, costa arched towards base, thence straight, apex acute, very slightly produced, termen gently rounded, moderately oblique; pale ochreous-grey; first line from one-fourth costa, pale fuscous, scarcely traceable, at first outwardly oblique, then angled inwards, thickened and blackish below middle with a posterior acute tooth, fading again at its termination at one-third dorsum; a median, subcostal, dark fuscous, discal dot; postmedian line from five-sixths costa, pale fuscous, indistinct, inwardly oblique, at one-third from costa thickened and blackish, doubly sinuate with two slight posterior teeth in disc, and an acute anterior tooth above dorsum, bent inwards and fading towards its termination at two-thirds dorsum; a subterminal series of fuscous dots; some indistinct terminal fuscous dots; cilia pale ochreous-grey. Hindwings with termen straight, apex and tornus rounded; pale ochreous-grey; a fuscous discal dot before middle; indistinct suffused postmedian and subterminal lines; cilia pale ochreous-grey.

Redescribed from Lower's type, which is in the South Australian Museum, and very distinct from any other species. The second example is a ♀ in Coll. Lyell.

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φοινικινος, purplish.

♂. 40 mm. Head pale grey with a whitish line between antennae. Palpi 2½; pale grey. Antennae whitish-grey; pectinations in ♂ 6. Thorax purple-grey. Abdomen purple-grey; beneath mostly whitish. Legs purple-grey mixed with whitish, tarsi dark fuscous annulated with ochreous-whitish. Forewings triangular, costa straight to near apex, apex acute, termen sinuate, slightly oblique; purple-grey; a whitish costal line almost to apex; first line at one-fourth, fuscous, dentate, very fine and indistinct; a median, subcostal, discal dot, whitish, edged with fuscous; postmedian line straight, from three-fourths costa to two-thirds dorsum, slightly darker, lower half edged anteriorly with whitish; a subterminal series of minute fuscous dots, edged anteriorly with whitish, and connected with termen by fine whitish lines on veins; a terminal series of fuscous dots; cilia purple, apices whitish. Hindwings with termen rounded; as forewings, but without first line; a straight, distinct, transverse, median line. Underside whitish, irrorated with purple-grey; discal white dots edged with fuscous; wavy postmedian and subterminal lines; a ferruginous blotch between these, below middle.

♀. 41 mm. Palpi 3; reddish-brown. Antennae very shortly unipectinate (two-thirds). Colour reddish-brown; postmedian lines yellowish; subterminal and terminal dots obsolete. Underside whitish-ochreous irrorated with reddish-brown; broad reddish-brown terminal bands containing a wavy subterminal line. The short pectinations of the ♀ antennae are a peculiar character.

North Queensland: Meringa (♂ type in Coll. Goldfinch) in November, and Kuranda (F. P. Dodd, ♀ type in Coll. Barnard), both near Cairns.

61. Epidesmia replicataria.

Phrataria replicataria Wlk., *Cat. Brit. Mus.*, xxxv, 1700.—*Epidesmia replicataria* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1161.

Queensland: Mt. Tambourine, National Park (2,500 feet). New South Wales: Ben Lomond, Ebor, Katoomba, Mt. Kosciusko (5,000 feet). Victoria: Beaconsfield, Gisborne.

62. Epidesmia transcissata.

Phrataria transcissata Wlk., *Cat. Brit. Mus.*, xxvi, 1742.—*Epidesmia transcissata* Meyr., Proc. Linn. Soc. N.S.W., 1889, 1161.

New South Wales: Sydney. Victoria: Gisborne.

63. Epidesmia pachygramma.

Darantasia pachygramma Low., *Trans. Roy. Soc. S. Aust.*, 1893, 154.

♀. 18 mm. Head whitish; face fuscous. Palpi 2; fuscous. Antennae whitish. Thorax and abdomen whitish, with some fuscous irroration. Forewings rather narrowly triangular, costa nearly straight, apex acute, termen nearly straight, strongly oblique; whitish with sparse fuscous irroration appearing grey; a broad blackish streak from dorsum near base, nearly parallel to costa, ending in a point at two-fifths; a second similar streak from dorsum before tornus, nearly parallel to termen, slightly inwardly curved, ending in a fine point beneath apex; a terminal series of fuscous dots; cilia whitish. Hindwings with termen slightly rounded; pale grey.

Redescribed from Lower's type. This little species is not near any other. Its appearance suggests a *Dichromodes*, but it has the neuration of *Epidesmia*. Its generic location cannot be definitely fixed in the absence of the ♂.

Western Australia: Eucla.

Genus 10. Arcina.

Arcina Wlk., *Cat. Brit. Mus.*, xxvi, 1743; Prout, *Gen. Insect.*, Oenochrom., 28.

Face with strong, obtuse, triangular, anterior convexity. Tongue present. Palpi long, subascending and closely appressed to face from base, thence porrect, thickened with loosely appressed hairs. Antennae of ♂ bipectinate to near apex, pectinations moderately long, those on inner side rather shorter. Thorax and abdomen slender; the former hairy beneath. Femora smooth. Tarsi with minute spines on posterior tibiae only. Forewings with areole present (according to Prout sometimes disconnected), 11 closely approximated to areole, and occasionally shortly anastomosing with it near its apex, 12 free. Hindwings with 6 and 7 irrorated with purple-grey; discal white dots edged with fuscous; wavy postmedian and subterminal lines; a ferruginous blotch between these, below middle.

♀. 41 mm. Palpi 3; reddish-brown. Antennae very shortly unipectinate (two-thirds). Colour reddish-brown; postmedian lines yellowish; subterminal and terminal dots obsolete. Underside whitish-ochreous irrorated with reddish-brown; broad reddish-brown terminal bands containing a wavy subterminal line. The short pectinations of the ♀ antennae are a peculiar character.

North Queensland: Meringa (♂ type in Coll. Goldfinch) in November, and Kuranda (F. P. Dodd, ♀ type in Coll. Barnard), both near Cairns.

61. EPIDESMIA REPLICATARIA.

Phrataria replicataria Wlk., *Cat. Brit. Mus.*, xxxv, 1700.—*Epidesmia replicataria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1161.

Queensland: Mt. Tambourine, National Park (2,500 feet). New South Wales: Ben Lomond, Ebor, Katoomba, Mt. Kosciusko (5,000 feet). Victoria: Beaconsfield, Gisborne.

62. EPIDESMIA TRANSCISSATA.

Phrataria transcissata Wlk., *Cat. Brit. Mus.*, xxvi, 1742.—*Epidesmia transcissata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1161.

New South Wales: Sydney. Victoria: Gisborne.

63. EPIDESMIA PACHYGRAMMA.

Darantasia pachygramma Low., *Trans. Roy. Soc. S. Aust.*, 1893, 154.

♀. 18 mm. Head whitish; face fuscous. Palpi 2; fuscous. Antennae whitish. Thorax and abdomen whitish, with some fuscous irroration. Forewings rather narrowly triangular, costa nearly straight, apex acute, termen nearly straight, strongly oblique; whitish with sparse fuscous irroration appearing grey; a broad blackish streak from dorsum near base, nearly parallel to costa, ending in a point at two-fifths; a second similar streak from dorsum before tornus, nearly parallel to termen, slightly inwardly curved, ending in a fine point beneath apex; a terminal series of fuscous dots; cilia whitish. Hindwings with termen slightly rounded; pale grey.

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There is only one species, a large and handsome insect, which I have already sufficiently described. The sexes are similar.

64. ARCINA FULGORIGERA.

Wlk., *Cat. Brit. Mus.*, xxvi, 1744.—*Prorocrania argyritis* Turn., *Trans. Roy. Soc. S. Aust.*, 1904, 226.

Western Australia: Mundaring, Waroona, Kelmscott, Albany.

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